



**APRIL 2024** 



# 1. Select Heliport Tables

**Table 1-1: Heliport Compatibility Initial Viability** 

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Facility Name	Loc Id	User Category	TLOF Dimensions	Initial Viability Test	Notes
AdventHealth Gordon	GE02	Medical	50x50	Yes	Marked for further evaluation
Ae153 Base	GA93	Medical	40x40	No	Inadequate TLOF Dimensions
Ae154 Base	4GE7	Medical	40x40	No	Inadequate TLOF Dimensions
Air Evac 95	GA15	Medical	40x40	No	Inadequate TLOF Dimensions
Air Evac Base 142	GA34	Medical	40x40	No	Inadequate TLOF Dimensions
Air Evac Base 86	GA07	Medical	40x40	No	Inadequate TLOF Dimensions
Apple 1	11GE	Misc Non-Aviation Business	50x50	Yes	Marked for further evaluation
Appling General Hospital	GA78	Medical	40x40	No	Inadequate TLOF Dimensions
Au Medical Center & Children's Hospital Of Georgia	4GA2	Medical	63x63	Yes	Marked for further evaluation
Bainbridge Memorial Hospital	4GA3	Medical	30x30	No	Inadequate TLOF Dimensions
Barrow Medical Center	59GA	Medical	60x60	Yes	Marked for further evaluation
Beaver Creek Lodge	25GE	Hotel	100x100	Yes	Marked for further evaluation
Beaver Trail	GA40	Individual/Residential	250x250	Yes	Marked for further evaluation
Blue Ridge Tours	70GA	Aviation Business	16x16	No	Inadequate TLOF Dimensions
Bridge Building	GA66	Medical	45x45	No	Marked for further evaluation
Buford Precinct	35GA	Police	40x40	No	Inadequate TLOF Dimensions
Burke County Hospital	2GE1	Medical	30x30	No	Inadequate TLOF Dimensions
Caffrey	00GE	Aviation Business	125x95	Yes	Marked for further evaluation
Caleb	24GA	Individual/Residential	25x25	No	Inadequate TLOF Dimensions
Calhoun	68GA	Individual/Residential	40x40	No	Inadequate TLOF Dimensions
Candler County Hospital	GA32	Medical	40x40	No	Inadequate TLOF Dimensions
Central State Hospital	6GA6	Medical	50x50	Yes	Marked for further evaluation
Childrens Health Care Atl At Scottish Rite 1	GA11	Medical	40x40	No	Inadequate TLOF Dimensions
Childrens Health Care Atl At Scottish Rite 2	GA11	Medical	40x40	No	Inadequate TLOF Dimensions
Childrens Health Care Atl At Scottish Rite 3	GA11	Medical	40x40	No	Inadequate TLOF Dimensions



Facility Name	Loc Id	User Category	TLOF Dimensions	Initial Viability Test	Notes
Children's Healthcare Of Atlanta-Egleston 1	60GA	Medical	45x45	No	Marked for further evaluation
Children's Healthcare Of Atlanta-Egleston 2	60GA	Medical	45x45	No	Marked for further evaluation
Cobb General Hospital	34GA	Medical	25x25	No	Inadequate TLOF Dimensions
Curtis Parkway North	99GA	Aviation Business	220x180	Yes	Marked for further evaluation
Dekalb Police Dept	GA58	Police	25x25	No	Inadequate TLOF Dimensions
Doctors Hospital	8GA4	Medical	40x40	No	Inadequate TLOF Dimensions
Dorminy Medical Center	9GA7	Medical	40x40	No	Inadequate TLOF Dimensions
Dwight David Eisenhower Army Medical Cntr	8GA2	Medical	40x40	No	Inadequate TLOF Dimensions
East Georgia Rgnl Medical Center	GA28	Medical	90x90	Yes	Marked for further evaluation
Elite Helicopters	GE14	Individual/Residential	20x20	No	Inadequate TLOF Dimensions
Emanuel County Hospital	93GA	Medical	50x50	Yes	Marked for further evaluation
Emory Johns Creek Hospital	GE28	Medical	50x50	Yes	Marked for further evaluation
Emory University Hospital	7GA8	Medical	39x39	No	Inadequate TLOF Dimensions
Emory University Hospital Midtown	GA64	Medical	45x45	No	Marked for further evaluation
Fairview Park Hospital	48GA	Medical	25x25	No	Inadequate TLOF Dimensions
Falcons Nest	41GA	Police	25x25	No	Inadequate TLOF Dimensions
Floyd County Sheriff's Office	GE88	Police	33x33	No	Inadequate TLOF Dimensions
Fmc	GE13	Medical	40x40	No	Inadequate TLOF Dimensions
Fort Gordon Hq Helipad	GA26	State/Federal Government	40x40	No	Inadequate TLOF Dimensions
Fort McPherson	GA96	State/Federal Government	400x200	Yes	Marked for further evaluation
Galleria	16GA	Misc Non-Aviation Business	25x25	No	Inadequate TLOF Dimensions
Georgia Baptist Urgent Care	2GE2	Medical	40x40	No	Inadequate TLOF Dimensions
Georgia Mountain	1GE1	Misc Non-Aviation Business	200x200	Yes	Marked for further evaluation
Georgia Public Safety Training Center	90GA	State/Federal Government	30x30	No	Inadequate TLOF Dimensions
Grady Meml Hospital 1	1GE8	Medical	62x62	Yes	Marked for further evaluation
Grady Meml Hospital 2	1GE8	Medical	62x62	Yes	Marked for further evaluation



Facility Name	Loc Id	User Category	TLOF Dimensions	Initial Viability Test	Notes
Guardian Centers Of Georgia	GA97	Misc Non-Aviation Business	54x54	Yes	Marked for further evaluation
Gwinnett Comm Hosp D/B/A Eastside Med Cntr	12GA	Medical	50x50	Yes	Marked for further evaluation
Hamilton Medical Center	GA70	Medical	40x40	No	Inadequate TLOF Dimensions
Hartrampf	23GA	Individual/Residential	100×100	Yes	Marked for further evaluation
Hawks Ridge	22GE	Misc Non-Aviation Business	100x100	Yes	Marked for further evaluation
Hca Parkway Medical Center	6GA3	Medical	50x50	Yes	Marked for further evaluation
Hilton Garden Inn Downtown	7GA6	Hotel	37x37	No	Inadequate TLOF Dimensions
Houston Healthcare Hospital	2GA3	Medical	40x40	No	Inadequate TLOF Dimensions
Interstate North	GA54	Misc Non-Aviation Business	85x85	Yes	Marked for further evaluation
Kennestone	56GA	Medical	50x50	Yes	Marked for further evaluation
Lanier	GE03	Misc Non-Aviation Business	30x30	No	Inadequate TLOF Dimensions
Lanier Park Hospital	38GA	Medical	60x60	Yes	Marked for further evaluation
Latham Creek	14GA	Individual/Residential	20x20	No	Inadequate TLOF Dimensions
Legacy Medical Center	9GE8	Medical	30x30	No	Inadequate TLOF Dimensions
Linscott	9GE6	Misc Non-Aviation Business	15x15	No	Inadequate TLOF Dimensions
Mac	6GA7	Individual/Residential	60x60	Yes	Marked for further evaluation
Matthews	42GA	Misc Non-Aviation Business	25x25	No	Inadequate TLOF Dimensions
Mc Donald	GA84	Individual/Residential	320x55	Yes	Marked for further evaluation
Medical Center	01GA	Medical	65x65	Yes	Marked for further evaluation
Medical Center, Navicent Health	77GE	Medical	48x48	Yes	Marked for further evaluation
Meml Hospital (Savannah)	GA37	Medical	45x45	No	Marked for further evaluation
Meml Satilla Health	GA60	Medical	100x75	Yes	Marked for further evaluation
Monroe County Hospital	GA24	Medical	150x100	Yes	Marked for further evaluation
Mosby Ahp	7A7	State/Federal Government	40x40	No	Inadequate TLOF Dimensions
Northside Hospital	GA55	Medical	60x60	Yes	Marked for further evaluation



Facility Name	Loc Id	User Category	TLOF Dimensions	Initial Viability Test	Notes
Northside Hospital Forsyth	2GA4	Medical	40x40	No	Inadequate TLOF Dimensions
Northside Hospital Gwinnett	55GA	Medical	40x40	No	Inadequate TLOF Dimensions
Northside Hospital- Cherokee	8GE8	Medical	40x40	No	Inadequate TLOF Dimensions
Ntl Ems Headquarters	9GE9	Medical	20x20	No	Inadequate TLOF Dimensions
Okefenokee	3GE1	State/Federal Government	300x300	Yes	Marked for further evaluation
Peach Rgnl Medical Center	28GA	Medical	40x40	No	Inadequate TLOF Dimensions
Phoebe Putney Meml Hospital	3GE9	Medical	50x50	Yes	Marked for further evaluation
Phoebe Sumter	1GA7	Medical	40x40	No	Inadequate TLOF Dimensions
Piedmont Atlanta Hospital	2GA6	Medical	55x55	Yes	Marked for further evaluation
Piedmont Fayette Hospital	17GE	Medical	40x40	No	Inadequate TLOF Dimensions
Piedmont Henry Hospital	43GA	Medical	55x50	Yes	Marked for further evaluation
Piedmont Hospital-Newnan	21GA	Medical	46x46	Yes	Marked for further evaluation
Piedmont Newton Hospital	71GA	Medical	100x70	Yes	Marked for further evaluation
Pratt And Whitney Aircraft	1GA1	Aviation Business	90x90	Yes	Marked for further evaluation
Rabbit Hole	52GA	Individual/Residential	20x20	No	Inadequate TLOF Dimensions
Rabbit Hole Ii	GE92	Misc Non-Aviation Business	12x12	No	Inadequate TLOF Dimensions
Rabbit Hole Iii	GE15	Individual/Residential	800x600	Yes	Marked for further evaluation
Ramada Inn Antebellum	GA05	Hotel	400x400	Yes	Marked for further evaluation
Redmond Rgnl Medical Center	GA12	Medical	40x40	No	Inadequate TLOF Dimensions
Rockdale Hospital	3GE5	Medical	70x70	Yes	Marked for further evaluation
Ruffwood	73GA	Individual/Residential	40x75	No	Inadequate TLOF Dimensions
Screven Ems	84GA	Medical	48x48	Yes	Marked for further evaluation
Se Georgia Health System- Brunswick	GE24	Medical	45x45	No	Marked for further evaluation
Smith	06GA	Individual/Residential	300x300	Yes	Marked for further evaluation
Smyrna Hospital	40GA	Medical	50x50	Yes	Marked for further evaluation
South Fulton Medical Center	GA71	Medical	74x74	Yes	Marked for further evaluation
South Georgia Medical Center	54GA	Medical	42x42	No	Inadequate TLOF Dimensions



Facility Name	Loc Id	User Category	TLOF Dimensions	Initial Viability Test	Notes
Southern Rgnl Medical Center	49GA	Medical	30x30	No	Inadequate TLOF Dimensions
Spalding Rgnl Medical Center	45GA	Medical	40x40	No	Inadequate TLOF Dimensions
St Joseph'S Hospital (Atlanta)	GA52	Medical	40x40	No	Inadequate TLOF Dimensions
St Joseph'S Hospital (Savannah)	46GA	Medical	45x45	No	Marked for further evaluation
St Marys Health Care Systems	7GA0	Medical	40x40	No	Inadequate TLOF Dimensions
Stakely	14GE	Individual/Residential	50x50	Yes	Marked for further evaluation
State Capital Parking Lot 1	GA85	State/Federal Government	50x50	Yes	Marked for further evaluation
State Capital Parking Lot 2	GA85	State/Federal Government	50x50	Yes	Marked for further evaluation
Stone Mountain Park Public Safety	GE34	State/Federal Government	20x20	No	Inadequate TLOF Dimensions
Stone Mountain Park Skylift	92GA	State/Federal Government	110×110	Yes	Marked for further evaluation
Stonewall	3GA4	Police	35x35	No	Inadequate TLOF Dimensions
Tanner Medical Center	3GA2	Medical	50x50	Yes	Marked for further evaluation
Tanner Medical Center/Villa Rica	87GA	Medical	40x40	No	Inadequate TLOF Dimensions
The Barclay Condos	2GE9	Individual/Residential	150x150	Yes	Marked for further evaluation
Union General Hospital	1GA3	Medical	35x43	No	Inadequate TLOF Dimensions
University Hospital	GA13	Medical	53x53	Yes	Marked for further evaluation
Upson Rgnl Medical Center	GA02	Medical	40x40	No	Inadequate TLOF Dimensions
Virgil	2GE6	Individual/Residential	500x100	Yes	Marked for further evaluation
Vogtle Electric Generating Plant	GA51	Misc Non-Aviation Business	40x40	No	Inadequate TLOF Dimensions
Walton Rgnl Medical Center	GA38	Medical	33x33	No	Inadequate TLOF Dimensions
Washington County Rgnl Medical Center	58GA	Medical	52x52	Yes	Marked for further evaluation
Wayne Meml Hospital	39GA	Medical	60x60	Yes	Marked for further evaluation
Wellstar Douglas Hospital	3GE6	Medical	30x30	No	Inadequate TLOF Dimensions
West Georgia Medical Center	GA33	Medical	105x105	Yes	Marked for further evaluation
Wgcl-Tv	31GA	News Station	40x30	No	Inadequate TLOF Dimensions



Facility Name	Loc Id	User Category	TLOF Dimensions	Initial Viability Test	Notes
Williams	3GE2	Misc Non-Aviation Business	250x100	Yes	Marked for further evaluation
Wsb-Tv	7GA1	News Station	21x21	No	Inadequate TLOF Dimensions

Source: (Federal Aviation Administration, 2023), Woolpert Analysis



**Table 1-2: Secondary Heliport Viability and Notes** 

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Facility Name	Loc Id	User Category	TLOF Dimensions	Secondary Viability Test	Reason
AdventHealth Gordon	GE02	Medical	50x50	No	Inadequate space for FATO and/or Safety Area
Apple 1	11GE	Misc Non-Aviation Business	50x50	No	No - smaller than reported dimensions and no room for expansion
Au Medical Center & Children's Hospital Of Georgia	4GA2	Medical	63x63	No	Inadequate space for FATO and/or Safety Area
Barrow Medical Center	59GA	Medical	60x60	No	Inadequate space for FATO and/or Safety Area
Beaver Creek Lodge	25GE	Hotel	100x100	No	No - remote grass area, limited/no ground access, likely very little/no utilities.
Beaver Trail	GA40	Individual/Residential	250x250	No	No - residential heliport with no commercial or public application.
Bridge Building	GA66	Medical	45x45	No	Inadequate space for FATO and/or Safety Area
Caffrey	00GE	Aviation Business	125x95	Yes	Yes - owned by geospatial firm. Multiple landing pads and adequate space.
Central State Hospital	6GA6	Medical	50x50	Yes	Yes - ability to be right-sized with minor redesign.
Children's Healthcare Of Atlanta- Egleston 1	60GA	Medical	45x45	No	Inadequate space for FATO and/or Safety Area
Children's Healthcare Of Atlanta- Egleston 1	60GA	Medical	45x45	No	Inadequate space for FATO and/or Safety Area
Curtis Parkway North	99GA	Aviation Business	220x180	No	No - exact site unclear and facility likely operates on the adjacent airport.
East Georgia Rgnl Medical Center	GA28	Medical	90x90	Yes	Yes - ability to be right-sized with minor redesign.
Emanuel County Hospital	93GA	Medical	50x50	No	Inadequate space for FATO and/or Safety Area
Emory Johns Creek Hospital	GE28	Medical	50x50	No	Inadequate space for FATO and/or Safety Area



Facility Name	Loc Id	User Category	TLOF Dimensions	Secondary Viability Test	Reason
Emory University Hospital Midtown	GA64	Medical	45x45	No	Inadequate space for FATO and/or Safety Area
Fort McPherson	GA96	State/Federal Government	400x200	No	No - on military base and for exclusive use by the military. For this reason, it was excluded.
Georgia Mountain	1GE1	Misc Non-Aviation Business	200x200	No	No - grass patch without clear TLOF and inadequate space for FATO and/or Safety Area
Grady Meml Hospital 1	1GE8	Medical	62x62	No	Inadequate space for FATO and/or Safety Area
Grady Meml Hospital 1	1GE8	Medical	62x62	No	Inadequate space for FATO and/or Safety Area
Guardian Centers Of Georgia	GA97	Misc Non-Aviation Business	54x54	No	No - this is a private emergency training field designated specifically for helicopter landings. No commercial or public viability.
Gwinnett Comm Hosp D/B/A Eastside Med Cntr	12GA	Medical	50x50	No	Inadequate space for FATO and/or Safety Area
Hartrampf	23GA	Individual/Residential	100x100	No	No - residential heliport with no commercial or public application.
Hawks Ridge	22GE	Misc Non-Aviation Business	100×100	No	No - no established landing facility, just designated as a heliport to allow helicopter landings at a golf course.
Hca Parkway Medical Center	6GA3	Medical	50x50	No	Inadequate space for FATO and/or Safety Area
Interstate North	GA54	Misc Non-Aviation Business	85x85	Yes	Yes - limited room for expansion but otherwise viable landing facility with access to nearby attractions.
Kennestone	56GA	Medical	50x50	No	Inadequate space for FATO and/or Safety Area
Lanier Park Hospital	38GA	Medical	60x60	No	Inadequate space for FATO and/or Safety Area
Mac	6GA7	Individual/Residential	60x60	No	No - residential heliport with no commercial or public application.
Mc Donald	GA84	Individual/Residential	320x55	No	No - residential heliport with no commercial or public application.
Medical Center	01GA	Medical	65x65	No	Inadequate space for FATO and/or Safety Area



Facility Name	Loc Id	User Category	TLOF Dimensions	Secondary Viability Test	Reason
Medical Center, Navicent Health	77GE	Medical	48x48	No	Inadequate space for FATO and/or Safety Area
Meml Hospital (Savannah)	GA37	Medical	45x45	No	Inadequate space for FATO and/or Safety Area
Meml Satilla Health	GA60	Medical	100x75	No	Inadequate space for FATO and/or Safety Area
Monroe County Hospital	GA24	Medical	150x100	No	Inadequate space for FATO and/or Safety Area
Northside Hospital	GA55	Medical	60x60	No	Inadequate space for FATO and/or Safety Area
Okefenokee	3GE1	State/Federal Government	300x300	No	No - no utilities, extremely remote and likely for emergency landings.
Phoebe Putney Meml Hospital	3GE9	Medical	50x50	No	Inadequate space for FATO and/or Safety Area
Piedmont Atlanta Hospital	2GA6	Medical	55x55	No	Inadequate space for FATO and/or Safety Area
Piedmont Henry Hospital	43GA	Medical	55x50	No	Inadequate space for FATO and/or Safety Area
Piedmont Hospital- Newnan	21GA	Medical	46x46	No	Inadequate space for FATO and/or Safety Area
Piedmont Newton Hospital	71GA	Medical	100x70	No	Inadequate space for FATO and/or Safety Area
Pratt And Whitney Aircraft	1GA1	Aviation Business	90x90	No	No - no dedicated landing site and located on large engine manufacturing campus.
Rabbit Hole Iii	GE15	Individual/Residential	800x600	No	No - residential heliport with no commercial or public application.
Ramada Inn Antebellum	GA05	Hotel	400x400	Yes	Yes - grass area between several hotels.
Rockdale Hospital	3GE5	Medical	70x70	No	Inadequate space for FATO and/or Safety Area
Screven Ems	84GA	Medical	48x48	No	Inadequate space for FATO and/or Safety Area
Se Georgia Health System- Brunswick	GE24	Medical	45x45	No	Inadequate space for FATO and/or Safety Area
Smith	06GA	Individual/Residential	300x300	No	No - residential heliport with no commercial or public application. Exact location unclear.



Facility Name	Loc Id	User Category	TLOF Dimensions	Secondary Viability Test	Reason
Smyrna Hospital	40GA	Medical	50x50	Yes	Yes - ability to be right-sized with minor redesign.
South Fulton Medical Center	GA71	Medical	74x74	Yes	Yes - ability to be right-sized with minor redesign.
St Joseph'S Hospital (Savannah)	46GA	Medical	45x45	No	Inadequate space for FATO and/or Safety Area
Stakely	14GE	Individual/Residential	50x50	No	No - remote area with no commercial or public application.
State Capital Parking Lot 1	GA85	State/Federal Government	50x50	No	Inadequate space for FATO and/or Safety Area
State Capital Parking Lot 1	GA85	State/Federal Government	50x50	No	Inadequate space for FATO and/or Safety Area
Stone Mountain Park Skylift	92GA	State/Federal Government	110x110	Yes	Yes. While TLOF is smaller than reported, it's in a large lot and there is adequate space to expand.
Tanner Medical Center	3GA2	Medical	50x50	No	Inadequate space for FATO and/or Safety Area
The Barclay Condos	2GE9	Individual/Residential	150x150	No	No - possibly on condo rooftop, but exact location unclear and not marked. Reported TLOF size is inaccurate as there is no room for a landing facility of that size in this location.
University Hospital	GA13	Medical	53x53	No	Inadequate space for FATO and/or Safety Area
Virgil	2GE6	Individual/Residential	500x100	No	No - remote area with no commercial or public application.
Washington County Rgnl Medical Center	58GA	Medical	52x52	No	Inadequate space for FATO and/or Safety Area
Wayne Meml Hospital	39GA	Medical	60x60	Yes	Yes - ability to be right-sized with minor redesign.
West Georgia Medical Center	GA33	Medical	105x105	No	Inadequate space for FATO and/or Safety Area
Williams	3GE2	Misc Non-Aviation Business	250x100	No	No - no established landing facility, just designated as a heliport to allow helicopter landings at a golf course.

Source: (Federal Aviation Administration, 2023), Google Earth, Woolpert Analysis



**Table 1-3: Remaining Viable Heliports** 

Facility Name	Loc Id	User Category	TLOF Dimensions	Viability	Reason
Caffrey	00GE	Aviation Business	125x95	Yes	Yes - owned by geospatial firm. Multiple landing pads and adequate space.
Central State Hospital	6GA6	Medical	50x50	Yes	Yes - ability to be right-sized with minor redesign.
East Georgia Rgnl Medical Center	GA28	Medical	90x90	Yes	Yes - ability to be right-sized with minor redesign.
Interstate North	GA54	Misc Non-Aviation Business	85x85	Yes	Yes - limited room for expansion but otherwise viable landing facility with access to nearby attractions.
Ramada Inn Antebellum	GA05	Hotel	400x400	Yes	Yes - grass area between several hotels.
Smyrna Hospital	40GA	Medical	50x50	Yes	Yes - ability to be right-sized with minor redesign.
South Fulton Medical Center	GA71	Medical	74x74	Yes	Yes - ability to be right-sized with minor redesign.
Stone Mountain Park Skylift	92GA	State/Federal Government	110x110	Yes	Yes. While TLOF is smaller than reported, it's in a large lot and there is adequate space to expand.
Wayne Meml Hospital	39GA	Medical	60x60	Yes	Yes - ability to be right-sized with minor redesign.

Source: FAA ADIP, Google Earth, Woolpert Analysis



# 2. Heliport Analysis

# 1. Caffrey

The Caffrey Heliport (00GE) is a privately owned and privately used heliport owned by Mark and Leigh Caffrey who run Rotorworks, a geospatial firm that operates two helicopters.

# **Landing Dimensions**

The facility has a 20 ft. x 20 ft. TLOF, an 80 ft. x 80 ft. FATO, and a 100 ft. x 100 ft. SA. These dimensions fall short of the design criteria described for an eVTOL with a 50-foot controlling dimension described earlier in this section. Expanding the facility to meet those criteria would require only a slight redesign of the pavement and the possible relocation or loss of the nearest parking platform. The theoretical TLOF, FATO, and SA dimensions from EB 105 are overlaid onto the existing facility in **Figure 2-1**.

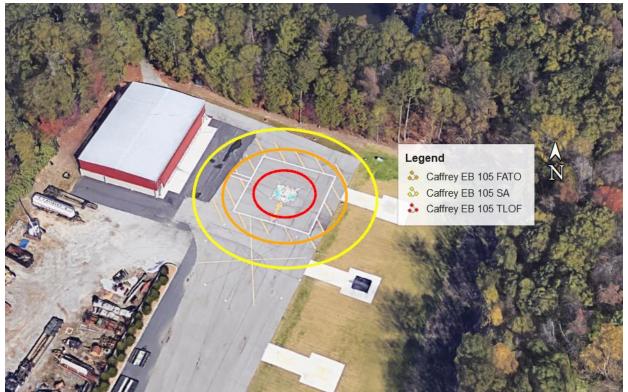


Figure 2-1: Vertiport Landing Dimension Overlay

Source: Google Earth, (Federal Aviation Administration, 2022), Woolpert Analysis

#### **Controlled Airspace**

00GE is not in Class B – E airspace, but it is within the Mode C Veil for Atlanta Hartsfield Jackson International Airport. A Mode C veil is the airspace within 30 nautical miles of an airport listed in Appendix D, Section 1 of



14 CFR Part 91 (generally primary airports within Class B airspace areas), from the surface upward to 10,000 feet MSL. Unless otherwise authorized by air traffic control, aircraft operating within this airspace must be equipped with an operable radar beacon transponder with automatic altitude reporting capability and operable Automatic Dependent Surveillance-Broadcast (ADS-B) equipment.

However, aircraft that were not originally certificated with an engine-driven electrical system or that have not subsequently been certified with a system installed may conduct operations within a Mode C veil provided the aircraft remains outside Class A, B, or C airspace; and below the altitude of the ceiling of a Class B or Class C airspace area designated for an airport or 10,000 feet MSL, whichever is lower. eVTOLs in development will have ADS-B transponders and would meet controlled airspace requirements.

While it may be congested and operators must meet the minimum requirements for operating in a Mode C veil, airspace does not pose a significant challenge should the facility be adapted into a vertiport. The location of 00GE within the Mode C veil is shown in **Figure 2-2**.

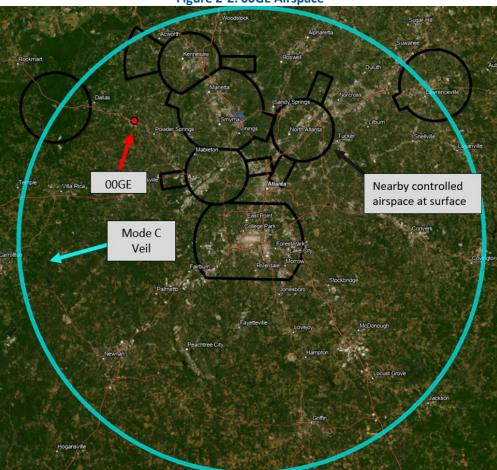


Figure 2-2: 00GE Airspace

Source: (Federal Aviation Administration, 2023)



#### **Obstruction Analysis**

There are numerous penetrations in the 8:1 airspace cone at 00GE, but they are limited exclusively to the trees surrounding the north, east, and west of the vertiport and the hangar immediately west of the heliport. The heliport, surrounding cone, and penetrations in the surface are shown in **Figure 2-3** and **Figure 2-4**.

Tree penetrations exist surrounding the helipad from 165° to 249° from the center of the TLOF. These penetrations begin approximately 38 feet from the edge of the FATO and extend outward at varying distances, with the furthest penetration at approximately 950 feet from the edge of the FATO. Beyond this point, no penetrations exist based on the Google Earth 3D analysis.

A hangar adjacent to the landing pad penetrates the airspace cone from  $273^{\circ} - 326^{\circ}$  from the center of the TLOF, beginning approximately 65 ft. from the edge of the FATO and extending 130 feet from the edge of the FATO. No obstacles from the FAA Digital Obstacle File (DOF) are present within the boundaries of the 8:1 airspace cone.

# **Feasibility Analysis**

00GE is a private heliport located on the ground, not on a rooftop. Therefore, load-bearing requirements for a rooftop facility would not apply and are not a concern for the site. While its landing dimensions are smaller than what would be needed under EB 105, a minor redesign of the facility would be needed to meet those dimensions. This redesign would involve revising existing pavement markings to accommodate the dimensions specified by EB 105 and redesigning or closing the parking area nearest the landing pad.

There are two types of penetrations in the airspace cone that potentially interfere with the ability of the facility to have a clear ingress and egress: trees and the adjacent hangar. While one clear route exists, EB 105 specifies that two separate paths must exist, and must have at least 135° separation. In order to establish this, tree clearing or trimming would be needed on at least one additional side of the facility.

The heliport is not in controlled airspace other than the Mode C veil described earlier, so aircraft equipped with ADS-B could largely operate without major restriction. Additionally, the facility contains four parking pads for aircraft as well as two hangars and a commercial building. These facilities mean that if the heliport were converted into a vertiport, it may be able to sustain higher volume and tempo operations than as aircraft will be able to move from the landing pad and park at a charging station, clearing the landing pad for a new operation. This development, however, would be contingent on the owners of the heliport selling or leasing the heliport to eVTOL operators.

#### Takeaways: 00GE

Based on this analysis, modifying this heliport to accommodate eVTOLs would involve a minor redesign of the landing area and the clearing/trimming of trees in some directions. The heliport is currently owned and operated privately for business use, so conversion of the facility would be contingent on the sale or lease of the heliport to other owners and operators. A use case for the facility would also have to be established since the heliport is not in a dense, urban environment and a last-mile issue would arise. It is possible that cargo or public service operators may sustain a use case if a need is identified nearby. Overall, this heliport represents a near best-case scenario in Georgia when considering the other heliports in the state, but there are still hurdles to converting a facility like this into a vertiport. **Table 2-1** summarizes the findings from this analysis.



**Table 2-1: Caffrey Heliport Compatibility Analysis** 

Facility Name/ID	Caffrey / 00GE
Facility Owner	Mark and Leigh Caffrey
Landing Dimensions (feet)	TLOF: 20x20; FATO 80x80, SA: 100x100  • Minor redesign needed to meet EB 105 landing geometry
Controlled Airspace at Surface	No – only Mode C veil
Obstructions in 8:1 Cone	Tree Penetration  • 249° - 165° from the center of TLOF, beginning 38 feet from edge of FATO out to 950 feet from edge of FATO  Hangar penetration  • 273° - 326° from center of TLOF, beginning 65 feet from edge of FATO to 130 feet from edge of FATO
Key Takeaways	<ul> <li>Minor redesign of landing area needed to meet EB 105 dimensions; clearing/trimming of trees in one direction needed for clear ingress/egress</li> <li>No major airspace issues</li> <li>Multiple landing pads and support hangars make this a best-case scenario compared to other heliports in Georgia</li> <li>Facility could support air cargo or public service use cases if a need is identified</li> <li>Still, heliport is privately owned and operated and thus permission or sale would be needed for eVTOLs to operate</li> </ul>

Outer Cone Edge 1,460 ft MSL Surface Penetrations 4,000 ft Heliport Site 960 ft MSL

Figure 2-3: 00GE Site and Airspace Cone

Tree Penetrations Hangar Penetration

Figure 2-4: 00GE Site and Cone Penetrations

## **Central State Hospital Heliport**

The Central State Hospital Heliport (6GA6) is a publicly owned and privately used heliport in Milledgeville, Georgia, owned by Central State Hospital for air medical operations.

# **Landing Dimensions**

As reported by the FAA, the landing area is 50 ft. x 50 ft., and this matches what was found on Google Earth. There is a FATO/SA surrounding the TLOF, though it is not clearly distinguished between the two. Regardless, it measures 60 ft. x 60 ft., and there is not a clearly marked third area.

When EB 105 dimensions are overlaid onto the existing landing area, it demonstrates that there is adequate room for a full-size vertiport landing area to be built. There may need to be grading of newly paved areas, but there are no trees or significant hurdles to expanding the landing area. The theoretical TLOF, FATO, and SA dimensions from EB 105 are overlaid onto the existing facility in **Figure 2-5**.



Figure 2-5: Vertiport Landing Dimension Overlay

Source: Google Earth, (Federal Aviation Administration, 2022), Woolpert Analysis

# **Controlled Airspace**

6GA6 is in uncontrolled, Class G airspace, at ground level up to 1,200 feet AGL. This means that operations are allowed at this heliport with minimal restrictions. Because Class G airspace is not controlled, an air traffic control clearance is not required to operate under visual flight rules.

## **Obstruction Analysis**

Google Earth's 3D feature was unavailable at the heliport, so the protocol for penetrations in **Section 6.4** was used. There are two types of significant penetrations in the airspace cone, including trees and the hospital building. The heliport, surrounding cone, and penetrations in the surface are shown in Figure 6 8.

The helicopter landing area has tree penetrations from  $184^{\circ} - 317^{\circ}$  from the center of the TLOF, beginning 415 feet and extending out to 780 feet from the edge of the FATO, as well as penetrations from  $40^{\circ} - 162^{\circ}$  from the TLOF beginning 150 ft. and extending out 780 ft. from the edge of the FATO.

The hospital building and adjacent road penetrate the airspace surface at 40° to 99° from the center of the TLOF, beginning immediately 240 feet off the edge of the FATO and extending out to 460 feet from the edge of the FATO.

There are four obstacles from the FAA DOF within the airspace cone for GA71. An examination of each obstacle's height and distance from the heliport determined that no obstacles penetrated the airspace cone.

Combined, these airspace penetrations are significant. While trees could theoretically be trimmed or removed, there is a substantial canopy that penetrates the surfaces. The hospital could not be removed and thus would continue to penetrate the airspace cone. These penetrations are shown in **Figure 2-6** and **Figure 2-7**.

#### **Feasibility Analysis**

6GA6 is a publicly owned and privately used heliport located at the Central State Hospital. This means that load-bearing requirements for a rooftop facility would not apply and are not a concern for the site. Its TLOF meets the requirements from EB 105, but its FATO and Safety Area would have to be expanded and paved. However, beyond grading and paving the new surfaces, minimal redesign would be needed to expand the heliport.

The heliport is in uncontrolled Class G airspace, so operations from this facility could take place with very few restrictions and do not present an obstacle.

There are two types of penetrations in the airspace cone that interfere with the ability of the facility to have a clear ingress and egress: trees and the hospital. Minimal tree clearing would be required to achieve a clear ingress and egress, as there is a large gap in trees north of the heliport, and the trees south of the heliport largely fall underneath the airspace cone. Should the facility be converted, an aeronautical survey should take place to verify the heights of these trees.

The site has one TLOF/FATO/SA and nowhere for aircraft to move if a charging need is anticipated. This fact does significantly limit the throughput of such a facility, limiting the heliport to its current use as an air medical facility.

#### Takeaways: 6GA6

Based on this analysis, it is possible to modify 6GA6 to accommodate eVTOLs. However, this modification would necessitate minor adjustments to the nearby pavement and can only be implemented within the heliport's present role as a medical facility. It is not equipped to handle high-tempo/volume traffic or other non-air ambulance medical services. **Table 2-2** documents a summary of the findings from this analysis.

**Table 2-2: South Fulton Medical Center Heliport Compatibility Analysis** 

Facility Name/ID	Central State Hospital / 6GA6
Facility Owner	Central State Hospital
Landing Dimensions (feet)	TLOF: 50x50; FATO: 60x60, SA: N/A  • Plenty of room to expand facilities to match EB  105 with minimal grading
Controlled Airspace at Surface	No – Class G
Obstructions in 8:1 Cone	<ul> <li>Penetrations</li> <li>Penetrations 184° - 317° from the center of the TLOF, beginning 415 feet and extending outward in some directions to 780 feet from the edge of the FATO</li> <li>Penetrations 40° - 162° from the center of the TLOF, beginning 150 feet and extending outward in some directions to 780 feet from the edge of the FATO</li> <li>Hospital Penetrations</li> <li>Penetration at 40° - 99° from the center of the TLOF beginning 240 feet and extending out to 460 feet from the edge of the FATO</li> </ul>
Key Takeaways	<ul> <li>Minimal redesign needed to meet EB 105 standards</li> <li>Uncontrolled airspace means minimal restrictions on operations</li> <li>Clear ingress and egress could likely be achieved with minor clearing or trimming of trees</li> <li>Assuming electric needs are met this facility could support air medical eVTOL operations</li> </ul>

Heliport Site 388 ft MSL Surface Penetrations DOF Site 4,000 ft Surface Penetrations Outer Cone Edge 888 ft MSL

Figure 2-6: 6GA6 Site and Airspace Cone



Figure 2-7: 6GA6 Site and Cone Penetrations



#### East Georgia Regional Medical Center Heliport

The East Georgia Regional Medical Center Heliport (GA28) is a privately owned and privately used medical heliport at the East Georgia Regional Medical Center.

#### **Landing Dimensions**

Despite ADIP records showing a 90 ft. x 90 ft. TLOF, upon aerial review it was clear the facility has a 40 ft. x 40 ft. TLOF, a 90 ft. x 90 ft. FATO, and a 130 ft. x 110 ft. SA. These dimensions fall short of the design criteria described for an eVTOL with a 50-foot controlling dimension described earlier in this section. Expanding the facility to meet those criteria would require a minor redesign of the surrounding roads and parking facilities at the hospital. The theoretical EB 105 TLOF, FATO, and SA dimensions are overlaid onto the existing facility in **Figure 2-8**.



**Figure 2-8: Vertiport Landing Dimension Overlay** 

Source: Google Earth, (Federal Aviation Administration, 2022), Woolpert Analysis

#### **Controlled Airspace**

GA28 is in uncontrolled, Class G airspace, at ground level up to 700 feet AGL. This means that operations are allowed at this heliport with minimal restrictions. Because Class G airspace is not controlled, an air traffic control clearance is not required to operate under VFR.

# **Obstruction Analysis**

There are numerous penetrations in the 8:1 approach and departure surface cone at GA28, but it is still possible to establish distinct approach and departure paths to and from the heliport with at least 135° separation between the paths, as prescribed in EB 105. The heliport, surrounding cone, and penetrations in the surface are shown in **Figure 2-9.** These penetrations exist in multiple directions, with the first penetration being a tree approximately 95 feet from the edge of the FATO. Tree penetrations extend out in multiple



directions out to 680 feet from the edge of the FATO. The associated hospital building also penetrates the 8:1 cone in multiple areas, from 273° - 333° from the center of the TLOF, with the penetrations beginning 138 feet from the edge of the FATO and extending to 495 feet from the edge of the FATO. These penetrations are documented more thoroughly in **Figure 2-10**.

It should be noted that no obstacles from the FAA Digital Obstacle File are present within the boundaries of the 8:1 airspace cone. Some minor obstruction removal of the tree penetrations may be needed to secure the approach and departure paths, but overall, the ability to establish these paths remains intact.

# **Feasibility Analysis**

GA28 is a medical heliport located on the ground, and not on a rooftop. This means that load-bearing requirements for a rooftop facility would not apply and are not a concern for the site. While its landing dimensions are smaller than what would be needed under the EB 105 dimensions described earlier, only a minor redesign of the facility would be needed to meet those dimensions. This redesign would involve relocating the hospital roads north and/or south of the heliport, and/or moving part of the parking lot northwest of the heliport. Alternatively, this heliport could be converted into a vertiport designed to accommodate only an eVTOL with a controlling dimension of less than 50 ft., in which case redesign may not be needed.

There are numerous penetrations in the 8:1 surface cone, but most of these penetrations are trees that could be trimmed if necessary to accommodate sufficient approach and departure paths. Penetrations in the approach and departure paths likely do not represent a significant threat to converting the facility into a vertiport.

Because the hospital owns and uses the heliport, only very specific operations would be allowed under the current ownership. Air ambulance services using eVTOLs could likely be accommodated at the site and utilizing an eVTOL for those services may prove a more cost-effective solution for hospital heliports after eVTOLs are certified. The site has one TLOF/FATO/SA and nowhere for aircraft to move if a charging need is anticipated. This fact significantly limits the throughput of such a facility, further limiting the heliport to its current use as an air ambulance facility.

#### Takeaways: GA28

Based on this analysis, it is possible to modify GA28 to accommodate eVTOLs. However, this modification would necessitate minor adjustments to the nearby pavement and can only be implemented within the heliport's present role as a medical facility. It is not equipped to handle high-tempo/volume traffic or other non-air medical services. **Table 2-3** documents a summary of the findings from this analysis.

Table 2-3: East Georgia Regional Medical Center Heliport Compatibility Analysis

Facility Name/ID	East Georgia Regional Medical Center / GA28
Facility Owner	East Georgia Regional Medical Center
Landing Dimensions (feet)	TLOF: 40x40; FATO 90x90, SA: 130x130  • Minor redesign needed to meet EB 105 landing geometry
Controlled Airspace at Surface	Class G - No
Obstructions in 8:1 Cone	Hospital Building Penetration  • 273° - 333° from center of TLOF, 138' – 495' from center of TLOF



Facility Name/ID	East Georgia Regional Medical Center / GA28
	Tree Penetrations  • Multidirectional from center of TLOF, 95' – 680' from center of TLOF
Key Takeaways	<ul> <li>Minor expansion of TLOF and FATO needed to meet EB 105 standards; Minor redesign of road and/or parking lot needed to accommodate SA.</li> <li>Numerous penetrations in 8:1 cone, but penetrations involving trees appear minimal and the facility can likely accommodate clear approach and departure paths with at least 135° separation with minor obstruction removal or marking.</li> <li>The heliport can be converted to a vertiport, but its capabilities would be limited to the low-volume medical operations that the facility currently accommodates.</li> </ul>



Surface Penetrations 4,000 ft Heliport Site 200 ft MSL Outer Cone Edge 700 ft MSL

Figure 2-9: GA28 Site and Airspace Cone



Tree Penetrations Hospital Building Penetration Tree Penetrations Tree Penetrations

Figure 2-10: GA28 Site and Cone Penetrations



#### **Interstate North**

The Interstate North Heliport (GA54) is a privately owned and privately used heliport owned by Equitable Life Assurance Society in Atlanta, Georgia.

# **Landing Dimensions**

The facility has a 45 ft. x 45 ft. TLOF and an 80 ft. x 80 ft. FATO but lacks an identifiable SA. These dimensions fall short of the design criteria described for an eVTOL with a 50-foot controlling dimension described earlier in this section. Expanding the facility to meet those criteria would require a minor redesign of the surrounding grass and trees. The theoretical TLOF, FATO, and SA dimensions from EB 105 are overlaid onto the existing facility in **Figure 2-11.** 



Figure 2-11: Vertiport Landing Dimension Overlay

Source: Google Earth, (Federal Aviation Administration, 2022), Woolpert Analysis

# **Controlled Airspace**

GA54 is in Marietta Class D at ground level up to 3,600 feet AGL. This airspace is shown in Figure 2-12.



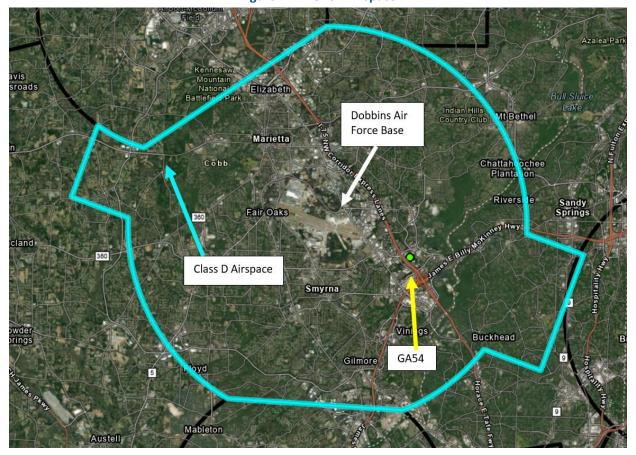


Figure 2-12: GA54 Airspace

Source: (Federal Aviation Administration, 2023)

Class D airspace is generally established to provide controlled airspace for terminal VFR and IFR at airports with an operational air traffic control tower (ATCT) and can also be found at non-towered airports with instrument procedures if justified or within the public's interest. Class D airspace generally exists from the surface to 2,500 feet above the airport elevation and, while individually tailored for each airport, it will normally contain the airport's instrument procedures. In this case, the airspace extends to 3,500 ft. above ground level. It is designed to contain IFR arrivals while between the surface and 1,000 ft. above the surface and IFR departures while between the surface and the base of adjacent controlled airspace.

Unless otherwise authorized, each aircraft operator must establish two-way radio communications with the designated air traffic control facility prior to entering the airspace and maintain communications while within it. Generally, air traffic separation services are not provided to aircraft in the airspace operating under VFR.

GA54 is also within the Mode C Veil for Atlanta Hartsfield Jackson International Airport. A Mode C veil is the airspace within 30 nautical miles of an airport listed in Appendix D, Section 1 of 14 CFR Part 91 (generally primary airports within Class B airspace areas), from the surface upward to 10,000 feet MSL. Unless otherwise authorized by air traffic control, aircraft operating within this airspace must be equipped with an operable radar beacon transponder with automatic altitude reporting capability and operable ADS-B equipment.

The location of GA54 within this airspace is problematic. The site is located roughly two miles off the end of Runway 29 at Dobbins Air Force Base. This location would mean that significant coordination with air traffic



control at Dobbins would be needed to ensure that VTOL operations at GA54 do not interfere with takeoffs or landings at that runway.

# **Obstruction Analysis**

There are numerous penetrations in the 8:1 approach and departure surface cone at GA54. Based on the available data, the heliport is surrounded in most directions by trees that visually penetrate the airspace cone. The heliport, surrounding cone, and penetrations in the surface are shown in **Figure 2-13** and **Figure 2-14**. These penetrations exist in multiple directions. The first penetrations are trees that overlap with the overlaid EB 105 Safety Area. Tree penetrations extend out in multiple directions to approximately 830 feet from the edge of the FATO.

An apartment building to the northwest penetrates the airspace cone from 292° - 330°, with the penetrations beginning 380 ft. from the edge of the FATO out to 800 ft. A commercial building east of GA54 penetrates the airspace cone from 96° - 101°, with the penetration beginning approximately 1,400 ft. from the edge of the FATO and continuing 1,500 ft. from the edge of the FATO. Southeast of the heliport is a commercial office building that penetrates the airspace cone from 129° - 157° beginning 470 ft. from the edge of the FATO and extending out to 740 ft. Farther south, a hotel penetrates the airspace cone from 152° - 161° beginning 855 ft. from the edge of the FATO out to 930 ft. from the edge of the FATO.

Twenty-three obstacles from the FAA DOF are present within the boundaries of the airspace cone. The height of these obstacles and their distance from the heliport were calculated to determine if any of the obstacles constituted a penetration in the surface. Out of the 23, it was determined that two penetrated the surface. However, these penetrations were repeats of the penetrations listed above; the apartment building to the northwest and the commercial building east. Because these penetrations are already included in the analysis, no additional analysis is needed.

#### **Feasibility Analysis**

GA54 is a private heliport located on the ground, not on a rooftop. Therefore, load-bearing requirements for a rooftop facility would not apply and are not a concern for the site. While its landing dimensions are smaller than what would be needed under the EB 105 dimensions described earlier, a minor redesign of the facility would be needed to meet those dimensions. This redesign would involve clearing out any trees or any obstacles in the SA, as well as grading any portion of the surface in the newly expanded footprint. Alternatively, this heliport could be converted into a vertiport designed to only accommodate eVTOL with a controlling dimension smaller than 50 ft., in which case redesign may not be needed.

There are numerous penetrations in the 8:1 surface cone. Tree penetrations exist in nearly every direction out from the vertiport so significant trimming or clearing would be needed to ensure a safe ingress and egress from the site. Beyond the tree penetrations, several buildings also penetrate the cone, but an approach and departure path could likely be designed around those buildings.

A major complication for this site is its location approximately two miles off the end of Runway 29 of Dobbins Air Force Base. The base sees significant traffic off of that runway and, because this heliport is located in the airspace of that base, vertiport operations would have to be cleared in accordance with Class D airspace rules. This requirement further limits the ability of the vertiport to have high-tempo or high-volume operations.

Because the heliport is a single landing pad with very little room to expand, VTOLs landing at the site would have to remain on the landing area until departing again, meaning only one VTOL would be able to use the site at any given time.



Given the ownership of the site, it likely supports low-tempo operations to fly specific individuals to or from locations crucial to their business. Site use would be limited to specific users unless specific permission was given or the facility was sold or leased to a different operator.

# Takeaways: GA54

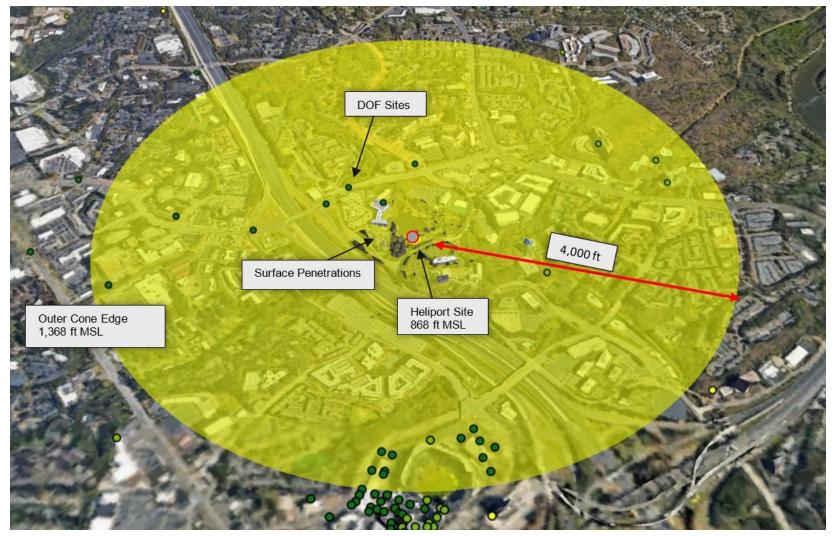
Based on this analysis, modifying this heliport to accommodate eVTOLs would face many barriers. Beyond the significant obstacle clearing that would be needed to establish an ingress and egress for the vertiport, the site has significant airspace complications and would feature a significantly limited use case. For these reasons, spending resources to convert GA54 into a vertiport is not advisable. **Table 2-4** documents a summary of the findings from this analysis.

**Table 2-4: Interstate North Heliport Compatibility Analysis** 

Facility Name/ID	Interstate North / GA54
Facility Owner	Equitable Life Assurance Society
Landing Dimensions (feet)	<ul> <li>TLOF: 45x45; FATO 80x80, SA: N/A</li> <li>Minor redesign needed to meet EB 105 landing geometry, including tree clearing and grading</li> </ul>
Controlled Airspace at Surface	Class D – Yes Two miles off RWY 29 of Dobbins Air Force Base
Obstructions in 8:1 Cone	Apartment Building Penetration  • 273° - 333° from center of TLOF, 400′ – 858′ from heliport  Commercial Building Penetration  • 96° - 101° from center of TLOF, 1,400′ – 1,500′ from heliport  Office Building  • 129° - 157° from center of TLOF, 470′ – 740′ from heliport  Hotel Penetration  • 152° - 161° from center of TLOF, 855′ – 933′  Tree Penetrations  • Multidirectional from center of TLOF, from Safety Area out to 800 feet.
Key Takeaways	<ul> <li>Minor expansion of TLOF and FATO needed to meet EB 105 standards; tree clearing/trimming would be required, grading of ground required</li> <li>Significant airspace issue; Class D airspace and location off runway would require significant coordination with air force base and FAA</li> <li>Numerous penetrations in 8:1 cone, especially close to landing area. If trees are cleared, minimal penetrations from buildings</li> <li>The heliport would face significant barriers if efforts were made to convert to a vertiport</li> </ul>



Figure 2-13: GA54 Site and Airspace Cone





Tree Penetration Apartment Building Penetration Commercial Building Penetrations Hotel Penetration Google Earth

Figure 2-14: GA54 Site and Cone Penetrations



#### Ramada Inn Antebellum Heliport

The Ramada Inn Antebellum Heliport (GA05) is a privately owned and privately used heliport in Madison, Georgia, owned by Ramada Inn Antebellum

#### **Landing Dimensions**

As reported by the FAA, the landing area is 400x400 feet, though it is not clear how this figure was determined. The entire grass area on which the heliport rests is approximately 170x135 feet.

When EB 105 dimensions are overlaid onto the existing landing area, it demonstrates that some redesign of the surrounding parking lot would be needed, and the center of the TLOF, FATO, and SA would need to be relocated into a more central position on the grass so that the building north of the site would not interfere with the SA of the vertiport. The theoretical TLOF, FATO, and SA dimensions from EB 105 are overlaid onto the existing facility in **Figure 2-15.** 

Figure 2-15: Vertiport Landing Dimension Overlay

Legend

Ramada Inn Heliport EB 105 FATO

Ramada Inn Heliport EB 105 SA

Ramada Inn Heliport EB 105 TLOF

Source: Google Earth, (Engineering Brief No. 105, Vertiport Design, 2022), Woolpert Analysis

#### **Controlled Airspace**

GA05 is in uncontrolled, Class G airspace at ground level. This means that operations are allowed at this heliport with minimal restrictions. Because Class G airspace is not controlled, an air traffic control clearance is not required to operate under visual flight rules.



# **Obstruction Analysis**

Google Earth's 3D feature was unavailable at the heliport, so the protocol for penetrations in Section 6.4 was used. There are two types of significant penetrations in the airspace cone, including trees and the adjacent hotels.

The heliport, surrounding cone, and penetrations in the surface are shown in Figure 2-16.

The tree penetrations are located between 295° - 218° from the center of the TLOF, starting at 125 feet and extending outward up to 800 feet from the edge of the FATO. It is important to note that while not all of the trees in the vicinity may be considered penetrations, the estimation of 100 feet for each tree was used due to the lack of 3D imagery for this site. As a result, any tree within a distance of 800 feet from the FATO is considered a penetration.

On the other hand, hotel penetrations can be found at 82° - 194° from the center of the TLOF, beginning right off the FATO and extending out to 150 feet from the edge of the FATO. There is also an additional hotel penetration located at 172°-192°, which begins 300 feet from the edge of the FATO and extends out to 380 feet from the same point. Combined, the hotel and tree penetrations mean significant complications to clear ingress and egress from the site.

No obstacles from the FAA DOF are within the airspace cone for GA05.

These penetrations are shown in Figure 2-16 and Figure 2-17.

## **Feasibility Analysis**

GO5 is a privately owned and privately used heliport located on a grass area near the Ramada Inn Antebellum in Madison, GA. This means that load-bearing requirements for a rooftop facility would not apply and are not a concern for the site. In order to right-size the heliport for eVTOL operations, the center of the landing area would have to be moved to the center of the grass area to avoid the adjacent hotels impacting the safety area. Even so, the parking lot to the east of the facility would have to be redesigned as the safety area would cross into this lot regardless of its location on the grass.

The heliport is in uncontrolled Class G airspace, so operations from this facility could take place with very few restrictions. The presence of controlled airspace is not an issue for this site.

There are two types of penetrations in the airspace cone that interfere with the ability of the facility to have a clear ingress and egress: trees and the surrounding hotel buildings. The hotels surrounding the heliport are extremely close to the facility and block a clear ingress and egress from the heliport in three directions. Trees block a clear ingress and egress in the remaining direction (as well as other directions). It is unlikely that penetrations could be cleared in such a way to achieve clear approaches.

#### Takeaways: GA05

Based on this analysis, it is not feasible to modify GA05 to accommodate eVTOLs. Even after a redesign of the landing site, a clear ingress and egress would be difficult if not impossible to achieve. **Table 2-5** documents a summary of the findings from this analysis.



Table 2-5: Ramada Inn Antebellum Heliport Compatibility Analysis

Facility Name/ID	Ramada Inn Antebellum Heliport / GA05
Facility Owner	Ramada Inn Antebellum
Landing Dimensions (feet)	TLOF: N/A; FATO: N/A, SA: N/A  • All landing areas unmarked on grass area measuring approximately 170x135 feet
Controlled Airspace at Surface	No – Class G
Obstructions in 8:1 Cone	<ul> <li>Penetrations</li> <li>Penetrations in all directions except 218° - 295° from the center of the TLOF, beginning 125 feet and extending outward in some directions to 800 feet from the edge of the FATO</li> <li>Hotel Penetrations</li> <li>Penetration at 82° - 194° from the center of the TLOF beginning immediately off the FATO and extending out to 150 feet from the edge of the FATO</li> <li>Additional hotel penetration at 172°-192° beginning 300 feet and extending out to 380 feet from the edge of the FATO</li> </ul>
Key Takeaways	<ul> <li>Redesign of adjacent parking lot and relocation of all landing area to center of grass needed to meet EB 105 standards</li> <li>Uncontrolled airspace means minimal restrictions on operations</li> <li>Clear ingress and egress unlikely to be achieved due to hotel and tree penetrations in nearly all directions</li> </ul>



Figure 2-16: GA05 Site and Airspace Cone

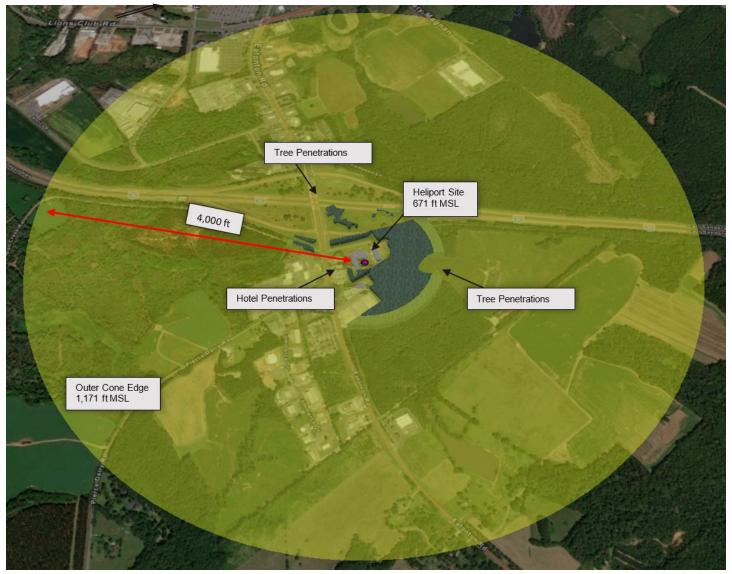
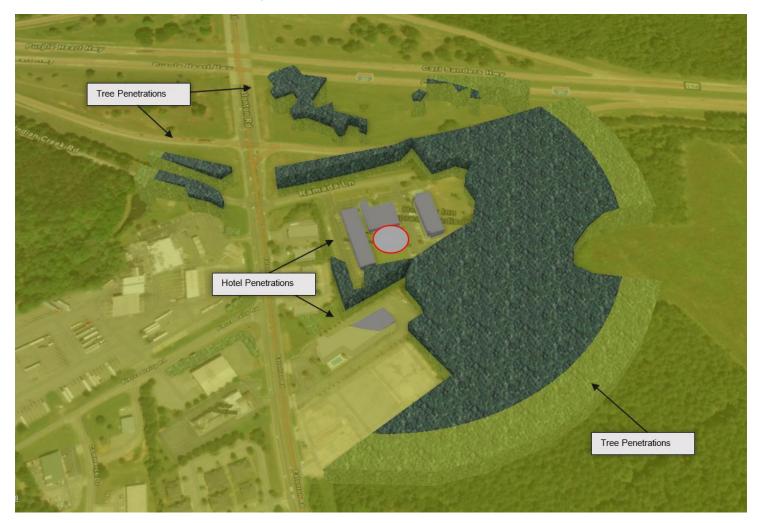




Figure 2-17: GA05 Site and Cone Penetrations





#### Smyrna Hospital

The Smyrna Hospital Heliport (40GA) is a privately owned and privately used heliport in Smyrna, Georgia, owned by Emory Adventist Hospital for air medical operations.

## **Landing Dimensions**

This heliport has a 50x50 foot TLOF, and the FATO and Safety Area are not marked. When EB 105 dimensions are overlaid onto the existing landing area, it demonstrates that there is adequate room for a 100x100 foot FATO, but the addition of the Safety Area would require trees to be removed north and northeast of the pad, and it would touch up against the hospital to its southwest.

Expanding the facility to meet EB 105 criteria is theoretically possible, but there is not much room and some redesign would be needed. The theoretical TLOF, FATO, and SA dimensions from EB 105 are overlaid onto the existing facility in **Figure 2-18**.

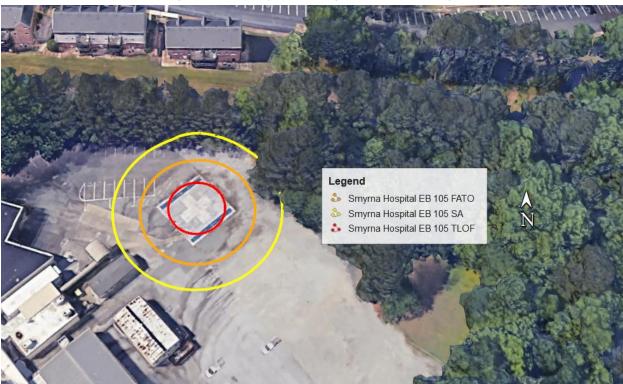


Figure 2-18: Vertiport Landing Dimension Overlay

Source: Google Earth, (Federal Aviation Administration, 2022), Woolpert Analysis

#### **Controlled Airspace**

40GA is in Marietta Class D airspace at ground level up to 3,600 feet MSL.

Class D airspace is generally established to provide controlled airspace for terminal visual flight rules and instrument flight rules at airports with an operational ATCT. It can also be found at non-towered airports with instrument procedures if justified or within the public's interest. Class D airspace generally exists from the surface to 2,500 feet above the airport elevation and, while individually tailored for each airport, it will normally contain the airport's instrument procedures. In this case, the airspace extends to 3,600 feet MSL. It



is designed to contain IFR arrivals while between the surface and 1,000 feet above the surface and IFR departures while between the surface and the base of adjacent controlled airspace.

Unless otherwise authorized, each aircraft operator must establish two-way radio communications with the air traffic control facility serving the airspace prior to entering the airspace and maintain communications while within it. Generally, air traffic separation services are not provided to aircraft in the airspace operating under visual flight rules.

40GA is also within the Mode C Veil for Atlanta Hartsfield Jackson International Airport. A Mode C veil is the airspace within 30 nautical miles of an airport listed in Appendix D, Section 1 of 14 CFR Part 91 (generally primary airports within Class B airspace areas), from the surface upward to 10,000 feet MSL. Unless otherwise authorized by ATC, aircraft operating within this airspace must be equipped with an operable radar beacon transponder with automatic altitude reporting capability and operable ADS-B equipment.

However, aircraft that were not originally certificated with an engine-driven electrical system or that have not subsequently been certified with a system installed may conduct operations within a Mode C veil provided the aircraft remains outside Class A, B or C airspace; and below the altitude of the ceiling of a Class B or Class C airspace area designated for an airport or 10,000 feet MSL, whichever is lower.

Because 40GA is located in Class D airspace, operations at this facility must contact two-way radio communications with the air traffic control facility serving the airspace. This means that additional coordination would be needed with air traffic control prior to establishing the facility as a vertiport.

The location of 40GA within Marietta Class D and the Mode C veil is shown in Figure 2-19.

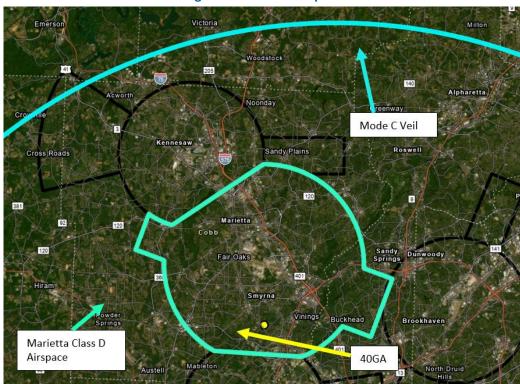


Figure 2-19: 40GA Airspace

Source: (Federal Aviation Administration, 2023)



## **Obstruction Analysis**

There are many significant penetrations in the airspace cone for 40GA, including trees, the hospital building, and residential buildings.

The heliport, surrounding cone, and penetrations in the surface are shown in Figure 2-20.

The helicopter landing area has tree penetrations in all directions except 192° to 242° from the center of the TLOF. These trees start about 10 feet from the edge of the FATO and extends outwards in some cases up to 1,500 feet.

The hospital building penetrates the airspace surface at 186° to 285° from the center of the TLOF, beginning 15 feet and extending out to 265 feet from the edge of the FATO.

Residential buildings penetrate the airspace surface from 286° - 31° from the center of the TLOF, beginning 95 feet and extending out to 660 feet from the edge of the FATO.

Combined, these airspace penetrations are significant and prevent a clear ingress and egress in nearly any direction. While trees could theoretically be trimmed or removed, they often serve as a visual barrier between the hospital and the nearby residential neighborhood. The hospital building and the residential buildings could not be removed and thus would continue to penetrate the airspace cone in many directions even if the trees were removed.

These penetrations are shown in Figure 2-20 and Figure 2-21.

#### **Feasibility Analysis**

40GA is a privately owned and privately used heliport located on pavement behind the Smyrna Hospital. This means that load-bearing requirements for a rooftop facility would not apply and are not a concern for the site. While its landing dimensions are smaller than what would be needed under the EB 105 dimensions described earlier, a minor redesign of the facility would be needed to meet those dimensions. This redesign would involve revising existing pavement markings to accommodate the dimensions specified by EB 105.

The heliport is in controlled Marietta Class D airspace, so operations from this facility would require coordination with the controlling air traffic control tower. It is also in the Mode C veil described earlier, so aircraft equipped with ADS-B could largely operate without major additional restrictions aside from Class D requirements.

There are three types of penetrations in the airspace cone that interfere with the ability of the facility to have a clear ingress and egress: trees, the hospital, and the residential buildings. It is unlikely that these penetrations could be mitigated in such a way that a clear ingress and egress could be established.

The site has one TLOF/FATO/SA and nowhere for aircraft to move if a charging need is anticipated. This fact significantly limits the throughput of such a facility, further limiting the heliport to its current use as an air ambulance facility.

### Takeaways: 40GA

Based on this analysis, modifying this facility to accommodate eVTOL operations is likely not feasible, due to the significant penetrations that exist in the airspace cone. **Table 2-6** documents a summary of the findings from this analysis.



Table 2-6: Smyrna Hospital Heliport Compatibility Analysis

Facility Name/ID	Smyrna Hospital / 40GA
Facility Owner	Emory Adventist Hospital
Landing Dimensions (feet)	<ul> <li>TLOF: 50x50; FATO N/A, SA: N/A</li> <li>Space is adequate for properly sized TLOF and FATO, but minor redesign of lot is needed for SA.</li> </ul>
Controlled Airspace at Surface	Yes – Class D at surface to 3,600' MSL and Mode C Veil at surface to 10,000 MSL
Obstructions in 8:1 Cone	Tree Penetration  Consistent penetrations in all directions except 192° - 242° from center of TLOF, beginning roughly 10 feet and extending up to 1,500 feet from the edge of the FATO  Hospital Penetration  186° - 285° from center of TLOF, beginning 15 feet and extending out to 265 feet from edge of FATO  Residential Building Penetration  286° - 31° from center of TLOF, beginning 96 feet and extending out to 660 feet from edge of FATO
Key Takeaways	<ul> <li>Minor redesign of landing area needed to meet EB 105 dimensions; clearing/trimming of trees nearby. SA would directly abut the hospital building</li> <li>Significant penetrations in all directions. While trees could be trimmed, hospital building and nearby residential uses would still be significant penetrations</li> <li>Site unlikely to reasonably establish clear ingress and egress and thus is not a feasible site for conversion</li> </ul>



Figure 2-20: 40GA Site and Airspace Cone

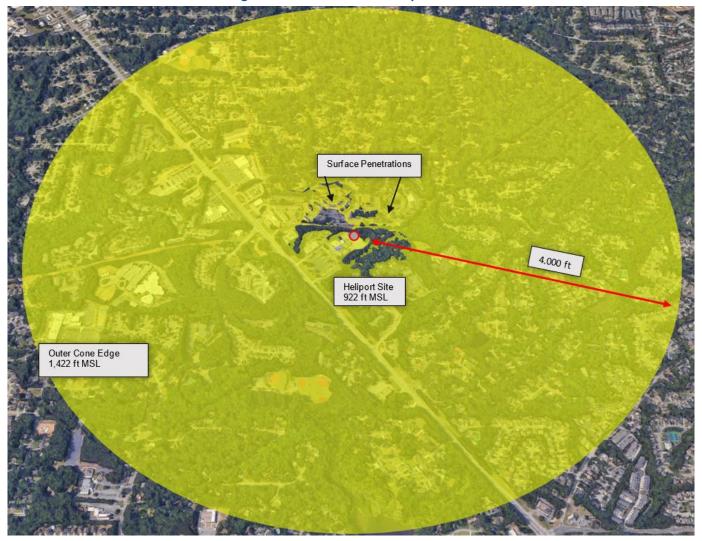
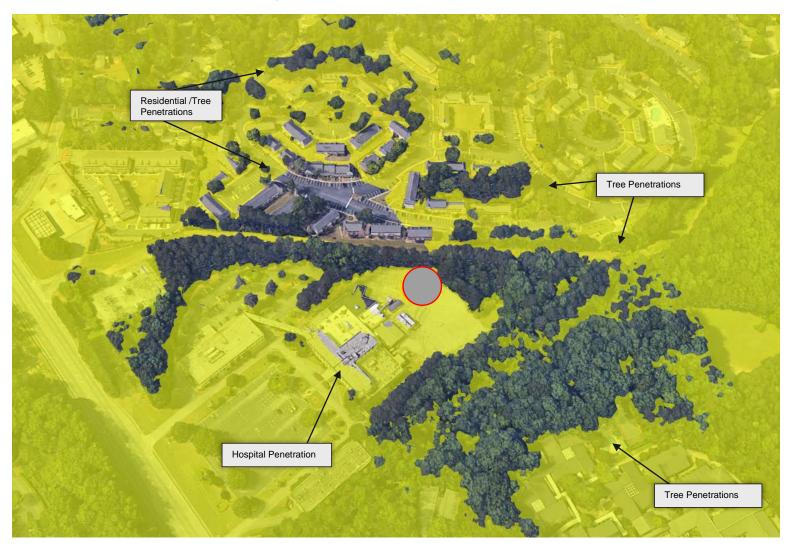




Figure 2-21: 40GA Site and Cone Penetrations





#### South Fulton Medical Center

The South Fulton Medical Center (GA71) is a privately owned and privately used heliport in East Point, Georgia, owned by Atlanta Medical Center for air medical operations.

## **Landing Dimensions**

As reported by FAA, the landing area is 74x74 feet, but aerial imagery from Google Earth reveals that this measurement includes the FATO. As measured on Google Earth, the TLOF is 37x37 feet, the FATO is 74x74 feet, and the Safety Area is not marked. When EB 105 dimensions are overlaid onto the existing landing area, it demonstrates that there is adequate room for a 100x100 foot FATO, but the addition of the Safety Area would require a redesign of the surrounding pavement and grass, and either grading/closure of the tunnel area to the north of the facility or moving the whole landing area slightly south to avoid that area.

Expanding the facility to meet EB 105 criteria is theoretically possible, but there is not much room, and some redesign would be needed. The theoretical TLOF, FATO, and SA dimensions from EB 105 are overlaid onto the existing facility in **Figure 2-22**: Vertiport Landing Dimension Overlay

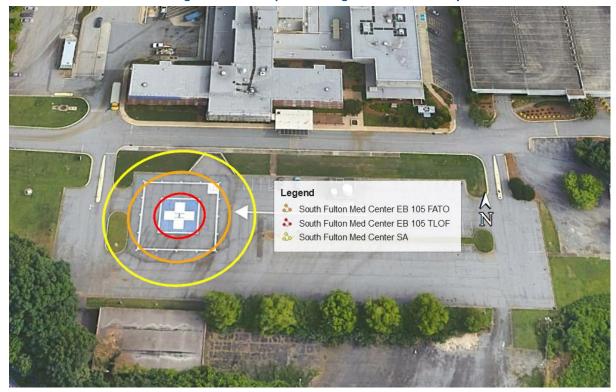


Figure 2-22: Vertiport Landing Dimension Overlay

Source: Google Earth, (Federal Aviation Administration, 2022), Woolpert Analysis

## **Controlled Airspace**

GA71 is in Atlanta Class B airspace at ground level up to 12,500 feet MSL. Class B airspace is generally designed to increase flight safety by decreasing the potential for midair collisions in the airspace surrounding airports with high-density air traffic. Any aircraft operating in Class B airspace is bound by specific operating rules and equipment prerequisites. The airspace that makes up Class B around a high-



density airport is designed by the FAA for safe and efficient air traffic control management to and from any airports contained within it.

Class B airspace generally exists from the surface up to 10,000 feet MSL surrounding the busiest airports in terms of passenger enplanements and aircraft operations. The configuration of the airspace is individually tailored for each location and includes a surface area and two or more layers. It is designed to contain all published instrument procedures. A clearance is required from Air Traffic Control (ATC) to operate in Class B airspace, and all aircraft cleared for operation in the area receive separation services within the airspace. The cloud clearance requirement for VFR operations is "clear of clouds."

GA71 is also within the Mode C Veil for Atlanta Hartsfield Jackson International Airport. A Mode C veil is the airspace within 30 nautical miles of an airport listed in Appendix D, Section 1 of 14 CFR Part 91 (generally primary airports within Class B airspace areas), from the surface upward to 10,000 feet MSL. Unless otherwise authorized by ATC, aircraft operating within this airspace must be equipped with an operable radar beacon transponder with automatic altitude reporting capability and operable ADS-B =equipment.

However, aircraft that were not originally certificated with an engine-driven electrical system or that have not subsequently been certified with a system installed may conduct operations within a Mode C veil provided the aircraft remains outside Class A, B or C airspace; and below the altitude of the ceiling of a Class B or Class C airspace area designated for an airport or 10,000 feet MSL, whichever is lower.

Because GA71 is located in Class B airspace, operations at this facility must receive clearance from air traffic control to operate in the airspace, and all aircraft in the airspace receive separation services. This means that additional coordination would be needed with air traffic control prior to establishing the facility as a vertiport so as to not overwhelm the air traffic control tower.

The location of GA71 within Atlanta Class B and the Mode C veil is shown in Figure 2-23.



Figure 2-23: GA71 Airspace

Source: (Federal Aviation Administration, 2023)



## **Obstruction Analysis**

There are two types of significant penetrations in the airspace cone, including trees and the hospital building. The heliport, surrounding cone, and penetrations in the surface are shown in **Figure 2-24**.

The helicopter landing area has tree penetrations in all directions except 105° to 12° from the center of the TLOF. These trees start about 45 feet from the edge of the FATO and extends outwards in some cases up to 1,240 feet.

The hospital building and adjacent road penetrate the airspace surface at 336° to 70° from the center of the TLOF, beginning immediately off the edge of the FATO and extending out to 665 feet from the edge of the FATO.

There are four obstacles from the FAA DOF within the airspace cone for GA71. An examination of each obstacle's height and distance of each obstacle from the heliport determined that none of these obstacles penetrated the airspace cone.

Combined, these airspace penetrations are significant. While trees could theoretically be trimmed or removed, there is a substantial canopy that penetrates the surfaces and significant effort would be involved in mitigating these penetrations. The hospital could not be removed and thus would continue to penetrate the airspace cone. These penetrations are shown in **Figure 2-24** and **Figure 2-25**.

#### **Feasibility Analysis**

GA71 is a privately owned and privately used heliport located on the pavement south of the South Fulton Medical Center. This means that load-bearing requirements for a rooftop facility would not apply and are not a concern for the site. Its landing dimensions are smaller than what would be needed under the EB 105 dimensions described earlier, and due to the roadway and tunnel north of the heliport, a redesign of the facility would be needed to meet those dimensions, either by shifting the entire facility south or by grading and closing the tunnel. Because this tunnel serves as an access point to the hospital from the heliport, it is unlikely that this tunnel could be closed without defeating the purpose of the landing area in the first place.

The heliport is in controlled Atlanta Class B airspace, so operations from this facility would require clearance from the controlling air traffic control tower. Because the heliport is already in existence, this clearance can be granted, but any attempt at higher volume or higher tempo operations may run into issues with controller workload.

There are two types of penetrations in the airspace cone that interfere with the ability of the facility to have a clear ingress and egress: trees and the hospital. Substantial tree clearing could create a clear ingress and egress for the facility.

The site has one TLOF/FATO/SA and nowhere for aircraft to move if a charging need is anticipated. This fact significantly limits the throughput of such a facility, further limiting the heliport to its current use as an air medical facility.

#### Takeaways: GA71

Based on this analysis, it is unlikely that the heliport could be resized to accommodate agnostic eVTOLs due to the redesign of the road and tunnel north of the heliport. The facility could support eVTOL operations if the operation was limited to an aircraft with a smaller controlling dimension than the 50-foot dimension used for this analysis. Still, the facility could not support high-tempo or high-volume operations and thus would be limited to its current use as an air medical facility. **Table 2-7** documents a summary of the findings from this analysis.



**Table 2-7: South Fulton Medical Center Heliport Compatibility Analysis** 

Facility Name/ID	South Fulton Medical Center / GA71
Facility Owner	Atlanta Medical Center
Landing Dimensions (feet)	TLOF: 37x37; FATO 74x74, SA: N/A  • Space is adequate for properly sized TLOF and FATO, but redesign is needed for SA.
Controlled Airspace at Surface	Yes – Class B at surface to 12,500 MSL and Mode C Veil at surface to 10,000 MSL
Obstructions in 8:1 Cone	Penetrations Penetrations in all directions except 105° - 12° from the center of the TLOF, beginning 45 feet and extending outward in some directions to 1,240 feet from the edge of the FATO Hospital Penetrations Penetration at 336° - 70° from the center of the TLOF beginning immediately off the FATO and extending out to 665 feet from the edge of the FATO
Key Takeaways	<ul> <li>Redesign of landing area needed to meet EB 105 dimensions; would require relocation of landing area or significant changes to tunnel/road directly north</li> <li>Class B airspace is strict and requires clearance</li> <li>Trees could be trimmed to create a clear ingress and egress, but space for landing area likely limits use to small eVTOLs</li> </ul>



Figure 2-24: GA71 Site and Airspace Cone

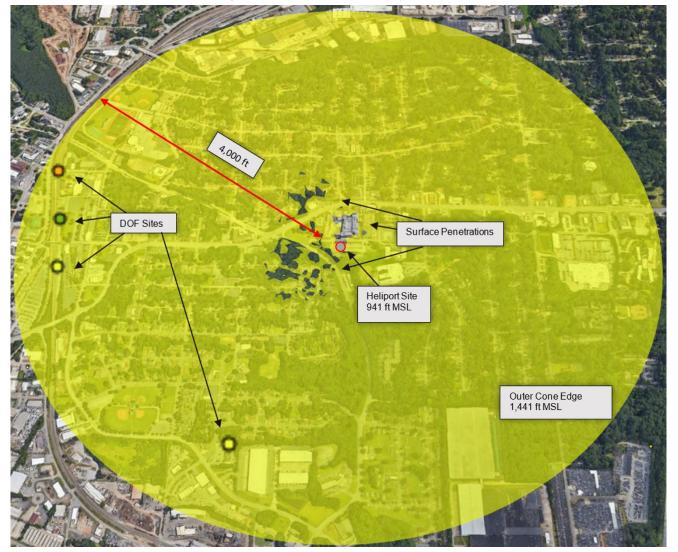




Figure 2-25: GA71 Site and Cone Penetrations





#### Stone Mountain Park Skylift

The Stone Mountain Park Skylift Heliport (92GA) is a publicly owned and privately used heliport owned by Stone Mountain Park Public Safety and used for their operations.

## **Landing Dimensions**

While FAA records suggest this facility has a 110 ft. x 110 ft. TLOF, a review of aerial imagery shows that the facility has a 40 ft. x 40 ft. TLOF, and the FATO and SA are not marked. In this case, FAA records likely refer to the entire paved area and not just the TLOF. The true dimensions fall short of the design criteria described for an eVTOL with a 50-foot controlling dimension described earlier in this section. Expanding the facility to meet those criteria would require only a slight redesign of the pavement. The theoretical TLOF, FATO, and SA dimensions from EB 105 are overlaid onto the existing facility in **Figure 2-26.** 



Figure 2-26: Vertiport Landing Dimension Overlay

Source: Google Earth, (Federal Aviation Administration, 2022), Woolpert Analysis

## **Controlled Airspace**

92GA not in Class B – E airspace, but it is within the Mode C Veil for Atlanta Hartsfield Jackson International Airport. A Mode C veil is the airspace within 30 nautical miles of an airport listed in Appendix D, Section 1 of 14 CFR Part 91 (generally primary airports within Class B airspace areas), from the surface upward to 10,000 feet MSL. Unless otherwise authorized by air traffic control, aircraft operating within this airspace must be equipped with an operable radar beacon transponder with automatic altitude reporting capability and operable ADS-B equipment.



However, aircraft that were not originally certificated with an engine-driven electrical system or that have not subsequently been certified with a system installed may conduct operations within a Mode C veil provided the aircraft remains outside Class A, B, or C airspace; and below the altitude of the ceiling of a Class B or Class C airspace area designated for an airport or 10,000 feet MSL, whichever is lower. eVTOLs in development will have ADS-B transponders and will meet the requirements.

While it may be congested and operators must meet the minimum requirements for operating in a Mode C veil, airspace does not pose a significant challenge should the facility be adapted into a vertiport. The location of 92GA within the Mode C veil is shown in **Figure 2-27.** 

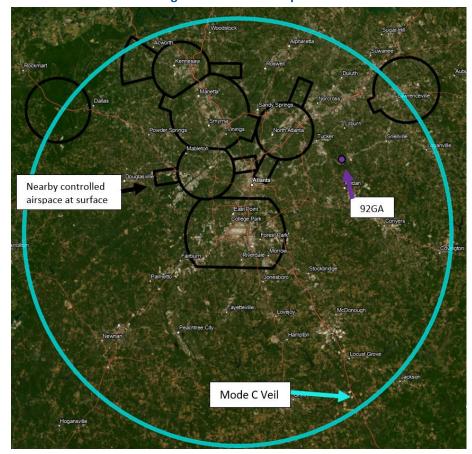


Figure 2-27: 92GA Airspace

Source: (Federal Aviation Administration, 2023)

### **Obstruction Analysis**

There are several penetrations in the airspace cone for 92GA, but they are limited to spotty trees in the parking lot where the landing area is located, and to Stone Mountain itself. The heliport, surrounding cone, and penetrations in the surface are shown in **Figure 2-28.** 

The helicopter landing area has spotty tree penetrations between 56° - 145° from the center of the TLOF. These trees start about 40 ft. from the edge of the FATO and extends outwards for around 700 ft. The penetrations caused by the trees seem to be minor and can be fixed with simple tree trimming or removal.



Stone Mountain is located between 177° and 242° from the center of TLOF, spanning 1,900 to 3,900 ft. from the edge of FATO. On top of the mountain, there is a tower that is represented in the FAA DOF. All these penetrations are noted in **Figure 2-28** and **Figure 2-29**.

# **Feasibility Analysis**

92GA is a publicly owned but privately used heliport located adjacent to a Stone Mountain Park parking lot. This means that load-bearing requirements for a rooftop facility would not apply and are not a concern for the site. While its landing dimensions are smaller than what would be needed under the EB 105 dimensions described earlier, a minor redesign of the facility would be needed to meet those dimensions. This redesign would involve revising existing pavement markings to accommodate the dimensions specified by EB 105.

There are two types of penetrations in the airspace cone that potentially interfere with the ability of the facility to have a clear ingress and egress: trees and Stone Mountain itself. The tree penetrations are relatively minor and could be cleared. After that process, clear ingress and egress would exist regardless of Stone Mountain's presence in the airspace cone. The heliport is not in controlled airspace other than the Mode C veil described earlier, so aircraft equipped with ADS-B could largely operate without major restrictions.

The location of this heliport presents a possible use case, in which tourists to the park could fly an eVTOL from a neighboring town or parking area. However, because the heliport is currently owned by Stone Mountain Park Public Safety, accommodations would have to be made so that the facility could still support emergency operations by Public Safety. From a conversion standpoint, the facility is relatively clear of any insurmountable challenges to support eVTOLs.

## Takeaways: 92GA

Based on this analysis, modifying this heliport to accommodate eVTOLs would involve a minor redesign of the landing area and the clearing/trimming of trees in some directions. A possible use case exists in transporting tourists to and from the park. Should the heliport be converted, additional components, like the availability of adequate electrical supply and fire safety protocols would have to be evaluated. **Table 2-8** documents a summary of the findings from this analysis.

Table 2-8: Stone Mountain Park Skylift Heliport Compatibility Analysis

Facility Name/ID	Stone Mountain Park Skylift / 92GA
Facility Owner	Stone Mountain Park Public Safety
Landing Dimensions (feet)	<ul> <li>TLOF: 40x40; FATO N/A, SA: N/A</li> <li>Landing area itself is simply painted pavement on parking lot. Space is adequate for properly sized TLOF and FATO, but minor redesign of lot is needed for SA.</li> </ul>
Controlled Airspace at Surface	No – only Mode C veil
Obstructions in 8:1 Cone	<ul> <li>Spotty in all directions except 56° - 145° from center of TLOF, beginning approximately 40 feet from the edge of the FATO and extending out approximately 700 feet</li> <li>Penetrations appear minor and require simple trimming</li> </ul>



Facility Name/ID	Stone Mountain Park Skylift / 92GA
	Mountain Penetration  • 177° - 242° from center of TLOF, beginning 1,900 feet from edge of FATO to 3,900 feet from edge of FATO
Key Takeaways	<ul> <li>Minor redesign of landing area needed to meet EB 105 dimensions; clearing/trimming of trees nearby. Stone Mountain can be avoided on approach/departure</li> <li>Possible use case transporting tourists exists, but accommodations would have to be made to ensure Public Safety has access</li> <li>Should the facility be converted, electrical supply and fire safety should be considered</li> </ul>



Figure 2-28: 92GA Site and Airspace Cone

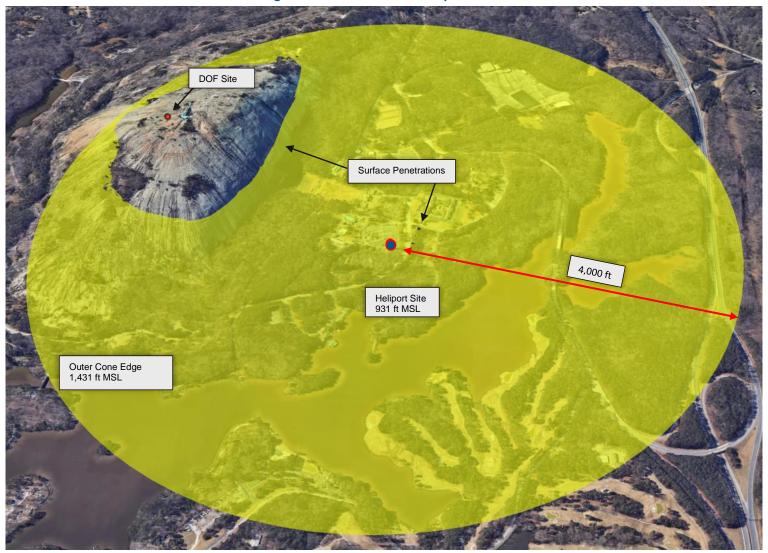
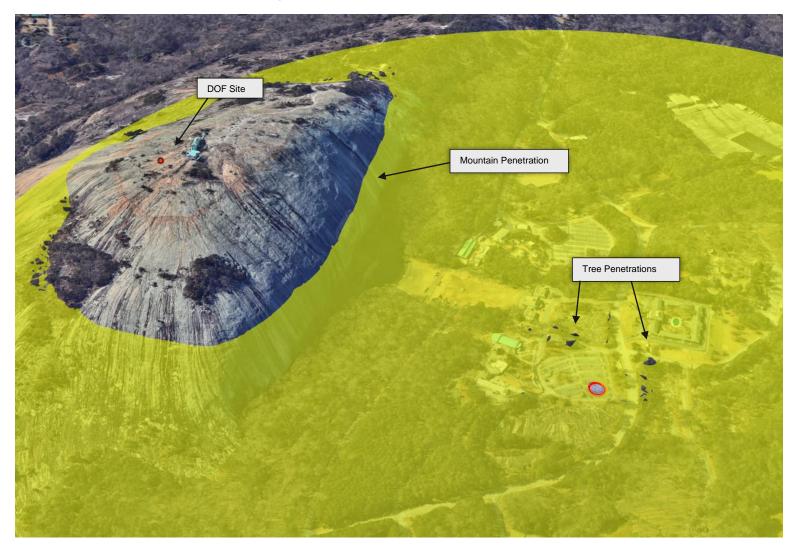




Figure 2-29: 92GA Site and Cone Penetrations





#### Wayne Memorial Hospital

The Wayne Memorial Hospital Heliport (39GA) is a privately owned and privately used heliport in Jesup, Georgia, owned by Wayne Memorial Hospital.

## **Landing Dimensions**

As reported by the FAA, the landing area is 60 ft. x 60 ft., but measuring on Google Earth indicates a 50-ft. x 50-ft. TLOF, and no marked FATO or SA.

When EB 105 dimensions are overlaid onto the existing landing area, it demonstrates that there is adequate room for a full size vertiport landing area to be built after some redesign. The SA extends into the existing parking lot, overlaps with the fuel tank, and pushes up against the adjacent hangar. These areas would have to be redesigned to accommodate EB 105 specifications. The theoretical TLOF, FATO, and SA dimensions from EB 105 are overlaid onto the existing facility in **Figure 2-30.** 

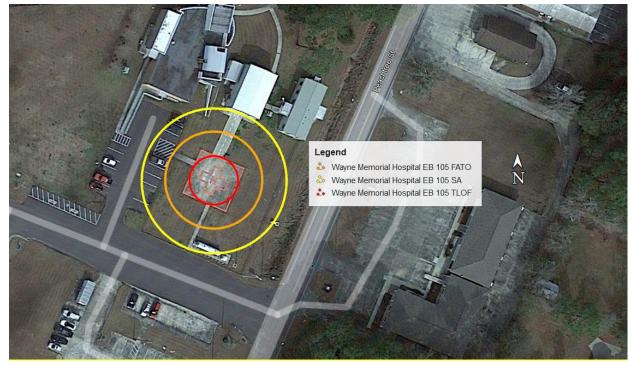


Figure 2-30: Vertiport Landing Dimension Overlay

Source: Google Earth, (Federal Aviation Administration, 2022), Woolpert Analysis

# **Controlled Airspace**

39GA is in uncontrolled, Class G airspace, at ground level up to 700 ft. AGL. This means that operations are allowed at this heliport with minimal restrictions. Because Class G airspace is not controlled, an air traffic control clearance is not required to operate under visual flight rules.

#### **Obstruction Analysis**

Google Earth's 3D feature was unavailable at the heliport, so the protocol for penetrations in Section 6.4 was used. There are two types of significant penetrations in the airspace cone, including trees and nearby buildings. The heliport, surrounding cone, and penetrations in the surface are shown in **Figure 2-31.** 



The helicopter landing area has tree penetrations that are spotty in most directions except from 245° - 320° from the center of the TLOF, beginning 130 ft. and extending out to 780 ft. from the edge of the FATO, as well as penetrations from 40° - 162° from the TLOF beginning 150 ft. and extending out to 780 ft. from the edge of the FATO.

There are also nearby building penetrations, most notably the hospital building itself and the hangar/terminal for the heliport. The heliport buildings penetrate the surface from 350° - 65° from the center of the TLOF and, beginning 30 ft. and extending out to 140 ft. from the edge of the FATO. The hospital building penetrates the surface from 241° - 255° from the center of the TLOF beginning 265 ft. and extending out to 510 ft. from the edge of the FATO. There are no obstacles from the FAA DOF within the airspace cone for 39GA.

Combined, the penetrations in the airspace cone represent a hurdle to achieving a clear ingress and egress, but due to the clear path on the west side of the heliport, it is likely that tree trimming could clear a separate path on the east side of the facility. Also, because of the assumptions for tree height made for this site, it is possible that some or many of the trees are shorter than 100 feet and may not truly penetrate the airspace cone. A true aeronautical survey would yield firm answers for this situation. These penetrations are shown in **Figure 2-31** and **Figure 2-32**.

#### **Feasibility Analysis**

39GA is a privately owned and privately used heliport located at the Wayne Memorial Hospital. Its location on the ground means that load-bearing requirements for a rooftop facility would not apply and are not a concern for the site. Its TLOF meets the requirements from EB 105, but it doesn't currently have a marked FATO or SA. When those dimensions are overlaid onto the existing facility, it shows that they could fit but it would require a redesign of the parking lot and relocation of the fuel tank.

The heliport is in uncontrolled Class G airspace, so operations from this facility could take place with very few restrictions and airspace does not present an obstacle. There are two types of penetrations in the airspace cone that interfere with the ability of the facility to have a clear ingress and egress: trees and several buildings. The building penetrations are the hospital and the heliport's hangar/terminal and thus are fixed. There is a clear path west without penetrations, so it is possible that trees east of the facility could be trimmed or cleared to create a separate approach/departure path. Should the facility be converted, an aeronautical survey should take place to verify the heights of these trees to determine if they are truly obstacles.

The site has one TLOF/FATO/SA, and aircraft would have nowhere to move for charging. This fact does significantly limit the throughput of such a facility, constraining the heliport to its current use as an air medical facility.

#### Takeaways: 39GA

Based on this analysis, it is possible to modify GA28 to accommodate eVTOLs. However, this modification would necessitate minor adjustments to the nearby pavement and can only be implemented within the heliport's present role as a medical facility. It is not equipped to handle high-tempo/volume traffic or other non-air ambulance medical services. **Table 2-9** documents a summary of the findings from this analysis.

**Table 2-9 Wayne Memorial Hospital Heliport Compatibility Analysis** 

Facility Name/ID	Wayne Memorial Hospital / 39GA
Facility Owner	Wayne Memorial Hospital
Landing Dimensions (feet)	TLOF: 50x50; FATO: N/A; SA: N/A



Facility Name/ID	Wayne Memorial Hospital / 39GA
	<ul> <li>Plenty of room to expand facilities to match EB</li> <li>105 with minimal grading</li> </ul>
Controlled Airspace at Surface	No – Class G
Obstructions in 8:1 Cone	<ul> <li>Fonty in most directions except for 245° - 320° from the center of the TLOF, beginning 130 feet and extending out to 780 feet from the edge of the FATO</li> <li>Building Penetrations</li> <li>Penetrations 350° - 65° from the center of the TLOF, beginning 30 feet and extending outward to 140 feet from the edge of the FATO</li> <li>Penetrations 241° - 255° from the center of the TLOF, beginning 265 feet and extending outward in some directions to 510 feet from the edge of the FATO</li> </ul>
Key Takeaways	<ul> <li>Minimal redesign needed to meet EB 105 standards, but would impact parking lot</li> <li>Uncontrolled airspace means minimal restrictions on operations</li> <li>Clear ingress and egress could likely be achieved with clearing or trimming of trees in at least one direction</li> <li>Assuming electric needs are met this facility could support air medical eVTOL operations</li> </ul>



Surface Penetrations 4,000 ft Surface Penetrations Heliport Site 99 ft MSL Outer Cone Edge 599 ft MSL

Figure 2-31: 39GA Site and Airspace Cone



Figure 2-32: 39GA Site and Cone Penetrations



Source: Google Earth, Woolpert