Federal Aviation Regulations Part 77 Sub-Part C Obstruction Analysis Report

Verizon Wireless Ziad Cheiban 20 Alexander Drive Wallingford, CT 06492

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Phone: 8604717860 Fax:

Site Identification: FOREST HEIGHTS CT

Nearest City: Milford, CT

Site Information (Coordinate Datum - NAD83)

Latitude: 41° - 13' - 58.54" **Decimal Degrees:** 41.2329277777778° **Longitude:** 73° - 2' - 41.89" **Decimal Degrees:** 73.0449694444444

Ground Elevation: 37 feet AMSL Structure Height: 126 feet AGL

Overall Height: 163 feet AMSL

FAA Number: Null

Airspace Study #: 2019-APS-2531-OE

Analyzed on: 8/20/2019. Using Airspace® 19.7.438. Airspace® Data Date: 7/15/2019

This Airspace Analysis was completed under all obstacle evaluation rules specified in Federal Aviation Regulations (FAR) Part 77 sub-Part C.

Approved,

Kristina K Pittman, Airspace Technician Federal Airways & Airspace® 1423 S. Patrick Dr Satellite Beach, FL 32937 (321)777-1266 Clyde J Pittman, Aerospace Engineer

Date Printed: 08-20-2019

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Site ID Number: FOREST_HEIGHTS_CT

AERONAUTICAL RECOMMENDATIONS

Notice is not required at the analyzed height and location.

TERPS® analysis has been completed for the proposed site. The maximum allowable height identified is 800 feet AMSL based upon the RWY 06 ILS and LOC procedures at BDR.

The proposed structure does not penetrate obstruction standards. An aeronautical analysis by the Federal Aviation Administration would likely find no adverse aeronautical impact. An extended study will not be required.

Marking and Lighting are not normally required for structures 200 feet or less. However, it may become a requirement based upon the outcome of the aeronautical study conducted by the FAA. It will then become part of the determination and a requirement of the determination.

No adverse impact to low altitude federal airways are identified.

No impact to VFR Traffic Pattern Airspace.

No Potential FCC Licensed AM Broadcast Station interference identified.

No impact to an Air Navigation Facility has been identified.

Site ID Number: FOREST_HEIGHTS_CT

LANDING FACILITY INFORMATION

The nearest public use landing facility to the proposed location is: IGOR I SIKORSKY MEMORIA (Ident: BDR)

The distance to the nearest runway of this landing facility is 31910 feet or 6 statute miles. The true bearing is 221.34° to this landing facility.

Private landing facilities are exempt from review by the FAA under FAR Part 77. However, locating near a private landing facility may affect aircraft operations during take-off and landing.

The nearest private landing facility is: CT46: MILF
The proposed structure is located 3706 feet or .7 statute miles.
The true bearing to this landing facility is 81 degrees.

The proposed structure is within 3 nautical miles (3.45 statute miles) of a private landing facility. This landing facility and supporters are likely to resist this proposal during the local zoning board hearing.

FAA NOTICE REQUIREMENTS

Notice to the FAA is not required because the proposed structure

- 1) is less than 200 feet above ground level [FAR Part 77.9(a)].
- 2) does not exceed runway slope criteria [FAR Part 77.9(b)].
- 3) is not a traverse way (road) [FAR 77.9(c)].
- 4) is not within a protected instrument procedure area [FAR 77.9 IFR].
- 5) is not on airport property [FAR 77.9(d)].
- 6) is not near an air navigation facility [FAR 77.9 IFR].

Date Printed: 08-20-2019

Site ID Number: FOREST_HEIGHTS_CT

AERONAUTICAL IMPACT

FAR Part 77 Subpart-C Obstruction Standards

The proposed structure would not violate or exceed obstruction standards as defined by FAR Part 77.17(a)(1), 77.17(a)(2) and 77.19.

Terminal Instrument Procedure Standards - FAR Part 77.17(a)(3)

No adverse impact with a US Terminal Approach or Departure Procedure has been identified.

Minimum Obstacle Clearance Altitude (MOCA) - FAR Part 77.17(a)(4)

The proposed structure is not located within a low altitude airway area or will not impact aircraft using any airway.

VFR Traffic Pattern Airspace

The proposed structure is not located within a VFR Traffic Pattern Airspace or is below the allowable height. It will not impact aircraft circling to land.

FCC Licensed AM Broadcast Station Proof-of-Performance

The proposed structure is not located within the specified range of an FCC Licensed AM radio and will not require Proof-of-Performance analysis.

Date Printed: 08-20-2019

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Federal Airways & Airspace
                               Summary Report: New Construction
                                       Antenna Structure
                     Airspace User: Kristina Pittman
                    File: 2019-APS-2531-OE
                    Location: Milford, CT
                    Latitude: 41°-13'-58.54"
                                                        Longitude: 73°-02'-41.89"
                    SITE ELEVATION AMSL.....37 ft.
                    STRUCTURE HEIGHT.....126 ft.
                    OVERALL HEIGHT AMSL.....163 ft.
                    SURVEY HEIGHT AMSL.....163 ft.
     NOTICE CRITERIA
       FAR 77.9(a): NNR (DNE 200 ft AGL)
       FAR 77.9(b): NNR (DNE Notice Slope)
       FAR 77.9(c): NNR (Not a Traverse Way)
       FAR 77.9:
                    NR Exceeds BDR Rwy 24, TERPS analysis required.
                    NNR TERPS® analysis complete. DNE BDR Rwy 24.
                    NNR FAR 77.9 IFR Straight-In Notice Criteria for HVN
       FAR 77.9:
       FAR 77.9(d): NNR (Off Airport Construction)
       NR = Notice Required
       NNR = Notice Not Required
       PNR = Possible Notice Required (depends upon actual IFR procedure)
             For new construction review Air Navigation Facilities at bottom
             of this report.
Notice is not required because a TERPS® analysis has been conducted. The structure, at
the analyzed height and location, does not exceed the maximum TERPS height.
     OBSTRUCTION STANDARDS
       FAR 77.17(a)(1): DNE 499 ft AGL
       FAR 77.17(a)(2): DNE - Airport Surface
       FAR 77.19(a): DNE - Horizontal Surface
FAR 77.19(b): DNE - Conical Surface
FAR 77.19(c): DNE - Primary Surface
FAR 77.19(d): DNE - Approach Surface
FAR 77.19(e): DNE - Approach Transitional Surface
FAR 77.19(e): DNE - Abeam Transitional Surface
     VFR TRAFFIC PATTERN AIRSPACE FOR: BDR: IGOR I SIKORSKY MEMORIAL
     Type: A RD: 31910.26 RE: 6
       FAR 77.17(a)(1):
                                 DNE
       FAR 77.17(a)(2):
                                  DNE - Height No Greater Than 200 feet AGL.
       VFR Horizontal Surface:
                                  DNE
       VFR Conical Surface:
                                  DNE
       VFR Primary Surface:
                                  DNE
       VFR Approach Surface:
                                 DNE
       VFR Transitional Surface: DNE
     VFR TRAFFIC PATTERN AIRSPACE FOR: HVN: TWEED-NEW HAVEN
     Type: A RD: 43917.3 RE: 6.3
       FAR 77.17(a)(1):
                              DNE
       FAR 77.17(a)(2):
                                  DNE - Greater Than 5.99 NM.
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VFR Horizontal Surface: DNE VFR Conical Surface: DNE VFR Primary Surface: DNE VFR Approach Surface: DNE VFR Transitional Surface: DNE

TERPS DEPARTURE PROCEDURE (FAA Order 8260.3, Volume 4)

FAR 77.17(a)(3) Departure Surface Criteria (40:1)

DNE Departure Surface

MINIMUM OBSTACLE CLEARANCE ALTITUDE (MOCA)

FAR 77.17(a)(4) MOCA Altitude Enroute Criteria

The Maximum Height Permitted is 500 ft AMSL

PRIVATE LANDING FACILITIES

FACIL	BEARING	RANGE	DELTA ARP	FAA
IDENT TYP NAME	To FACIL	IN NM	ELEVATION	IFR
CT46 HEL MILFORD-ALEXANDER	81.41	.61	+143	
Possible Impact to Private landing Facil	lity			

Exceeds Notice Standards by: 6 ft (N/A Private Heliport)

No Impact to Private Landing Facility

No violation of Helicopter Approach Surface.

Estimated safety margin is: 203 feet.

JSD HEL SIKORSKY 2.36 301.31 +143 No Impact to Private Landing Facility

Structure is beyond notice limit by 9340 feet.

CT89 HEL ITT 302.44 4.71 -164

No Impact to Private Landing Facility

Structure 164 ft below heliport.

CT76 HEL CHASE MANHATTAN BANK OF CT 276.7 4.8 -37

No Impact to Private Landing Facility

Structure 37 ft below heliport.

AIR NAVIGATION ELECTRONIC FACILITIES

FAC		ST			DIST	DELTA			GRND	APCH
IDNT	TYPE	AT	FREQ	VECTOR	(ft)	ELEVA	ST	LOCATION	ANGL	E BEAR
BDR	VOR/DME	R	108.8	219.7	34233	+154	CT	BRIDGEPORT	. 2	б
Alert	! IFR Notice	e is	not Re	equired	for thi	is strı	ıctı	ire.		

:! IFR Notice is not Required for this structu

Predict within Final Segment of Approach plus Fix Error Area. Predict within FAR 77.9 IFR Notice Requirement Area for BDR: VOR RWY 24 The maximum IFR No Notice Height for new construction is: 200' AMSL.

JWE	NDB	I	36	341.21	57520	-408	CT	CLERA		41
MAD	VOR/DME	R	110.4	72.97	101361	-53	CT	MADISON		03
CCC	VOR/DME	R	117.2	148.53	129684	+78	NY	CALVERTON		.03
KOKX	RADAR WXL	Y		159.6	142866	-32	NY	NEW YORK		01
CMK	VOR/DME	R	116.6	276.82	148472	-531	NY	CARMEL		2
ISP	RADAR	ON	2735.	185.11	156072	-19	NY	LONG ISLAND N	MacAR	01
QVH	RADAR ARSR	Y	1326.9	142.72	162454	-188	NY	RIVERHEAD		07
DPK	VOR/DME	R	117.7	203.86	175889	+40	NY	DEER PARK		.01
FOK	TACAN	R	111.0	141.77	183636	+113	NY	SUFFOLK CO		.04
HPN	RADAR	on	2735.	252.24	193631	-347	NY	WESTCHESTER (COUNT	1
HFD	VOR/DME	R	114.9	42.37	201820	-686	CT	HARTFORD		19

CFR Title 47, §1.30000-§1.30004

AM STUDY NOT REQUIRED: Structure is not near a FCC licensed AM station. Movement Method Proof as specified in §73.151(c) is not required. Please review 'AM Station Report' for details.

Nearest AM Station: WFIF @ 6489 meters.

Airspace® Summary Version 19.3.527

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08-20-2019 09:53:01

* F.A.R. 77 OBSTRUCTION ANALYSIS * **************************
Airspace User: Kristina Pittman
FILE: 2019-APS-2531-OE
LATITUDE: 41°-13'-58.54" LONGITUDE: 73°-02'-41.89"
SITE ELEVATION AMSL 37 ft. STRUCTURE HEIGHT126 ft. OVERALL HEIGHT AMSL163 ft.
77.17(a)(1) A height more than 499 ft. Above Ground Level (AGL).
******* DOES NOT EXCEED ********
THE MAXIMUM ALLOWABLE HEIGHT IS: 536 ft. AMSL
THE GROUND ELEVATION AT THE SITE IS: 37 ft. AMSL
THE OVERALL CASE ELEVATION IS: 163 ft. AMSL
THE CASE IS BELOW THE ALLOWABLE BY: 373 ft.

77.17(a)(2) A height AGL or airport elevation, whichever is higher.
******* DOES NOT EXCEED ********
BECAUSE: Proposed height DNE 200 feet Above Ground Level.
THE REFERENCE AIRPORT IDENT IS: BDR
THE AIRPORT ELEVATION IS: 8 ft. AMSL
THE DISTANCE FROM THE CASE TO ARP IS: 5.5609 NAUTICAL MILES
THE BEARING AIRPORT TO CASE IS: 41.343 DEGREES
THE CASE HEIGHT AGL IS:
ALLOWABLE HEIGHT
77.19 (a) A height exceeding a horizontal surface 150 ft. above airport elevation within a radius of >> BDR <<.
******* DOES NOT EXCEED ********
NOT WITHIN SPECIFIED HORIZONTAL SURFACE AREA
77.19(b) A height exceeding a conical surface (a slope outward 4000 ft. from the horizontal surface at 20/1 ratio).

******** DOES NOT EXCEED *********

NOT WITHIN SPECIFIED CONICAL SURFACE AREA

EXISTING RUNWAY 06/24

77.19(c) A height exceeding runway primary surface.

******* DOES NOT EXCEED *********

NOT WITHIN SPECIFIED RUNWAY PRIMARY SURFACE

77.19(e) A height exceeding a transitional surface abeam runway.

******* DOES NOT EXCEED ********

NOT WITHIN SPECIFIED RUNWAY ABEAM TRANSITIONAL SURFACE

77.19(d) A height exceeding an approach surface of RUNWAY 24.

THE BEARING TO THE CASE FROM THE THRESHOLD IS...... 40.232 degrees

THE ABEAM BEARING TO THE CENTERLINE IS...... 135 degrees

THE CENTERLINE OUTBOUND TRUE BEARING IS...... 45 degrees

THE ABEAM DISTANCE TO CENTERLINE FROM CASE IS...... 2638.1 ft.

THE RUNWAY THRESHOLD ELEVATION IS...... 6 ft. AMSL

THE DISTANCE FROM THRESHOLD + 200' TO THE CASE IS... 31710.947 ft.

THE DISTANCE FROM THRESHOLD + 200' TO NB IS...... 31603.33 ft.

THE CRITICAL WIDTH OF HALF THE APPROACH IS...... 4450.411 ft.

******* DOES NOT EXCEED ********

CASE IS BEYOND APPROACH SURFACE, OUT BY...... 21603.29 ft.

THE SLOPE OF RUNWAY 24 IS: 34 TO 1.

The FAA has defined this runway as a non-utility runway. It has a non-precision approach. The obstacle surface extends 10,000 feet (34:1 Slope) symmetrically centered along the runway centerline extended. Please review the US Terminal Procedures volume associated with this airport. If a procedure for this airport and/or runway exist use Terps® Professional software to determine the height limits (if any) the procedure will have on the proposed structure. Non-precision instrument procedures can extend 10 NM from the runway and a circling approach to the airport or runway can extend out up to 4.5 NM from every runway end.

EXISTING RUNWAY 11/29

	EXISTING RUNWAY 11/29
77.19(c) A	height exceeding runway primary surface.
	******* DOES NOT EXCEED ********
	NOT WITHIN SPECIFIED RUNWAY PRIMARY SURFACE
77 10/0) 7	height argooding a twongitional gunfage about municus
//.19(e) A	height exceeding a transitional surface abeam runway.
	******* DOES NOT EXCEED ********
	NOT WITHIN SPECIFIED RUNWAY ABEAM TRANSITIONAL SURFACE
77.19(d) A	height exceeding an approach surface of RUNWAY 29.
	THE BEARING TO THE CASE FROM THE THRESHOLD IS 38.463 degrees
	THE ABEAM BEARING TO THE CENTERLINE IS 187.83 degrees
	THE CENTERLINE OUTBOUND TRUE BEARING IS 97.83 degrees
	THE ABEAM DISTANCE TO CENTERLINE FROM CASE IS 27453.9 ft.
	THE RUNWAY THRESHOLD ELEVATION IS 6.5 ft. AMSL
	THE DISTANCE FROM THRESHOLD + 200' TO THE CASE IS 31905.65 ft.
	THE DISTANCE FROM THRESHOLD + 200' TO NB IS 16278.81 ft.
	THE CRITICAL WIDTH OF HALF THE APPROACH IS 2691.815 ft.
	******* DOES NOT EXCEED ********
	BEYOND DEFINED APPROACH & TRANSITIONAL AREAS.
	RUNWAY CENTERLINE OFFSET IS
	DISTANCE FROM THE THRESHOLD TO OFFSET IS 16478.77 ft.
	THE SLOPE OF RUNWAY 29 IS: 34 TO 1.
	The FAA has defined this runway as a non-utility runway. It has a non-precision approach. The obstacle surface extends 10,000 feet (34:1 Slope) symmetrically centered along the runway centerline extended. Please review the US Terminal Procedures volume associated with this airport. If a procedure for this airport and/or runway exist use Terps® Professional software to determine the height limits (if any) the procedure will have on the proposed structure. Non-precision instrument procedures can extend 10 NM from the runway.

4.5 NM from every runway end.

Non-precision instrument procedures can extend 10 NM from the runway and a circling approach to the airport or runway can extend out up to

BEGIN AIRPORT ANALYSIS FOR HVN 77.17(a)(2) A height AGL or airport elevation, whichever is higher. ******* DOES NOT EXCEED ********* BECAUSE: Location studied is further than 5.99 NM from ARP. 77.19 (a) A height exceeding a horizontal surface 150 ft. above airport elevation within a radius of >> HVN <<. ******* DOES NOT EXCEED ********* NOT WITHIN SPECIFIED HORIZONTAL SURFACE AREA 77.19(b) A height exceeding a conical surface (a slope outward 4000 ft. from the horizontal surface at 20/1 ratio). ******* DOES NOT EXCEED ********* NOT WITHIN SPECIFIED CONICAL SURFACE AREA ******* * BEGIN RUNWAY ANALYSIS * ******* EXISTING RUNWAY 02/20 77.19(c) A height exceeding runway primary surface. ******* DOES NOT EXCEED ******** NOT WITHIN SPECIFIED RUNWAY PRIMARY SURFACE 77.19(e) A height exceeding a transitional surface abeam runway. ******* DOES NOT EXCEED ********* NOT WITHIN SPECIFIED RUNWAY ABEAM TRANSITIONAL SURFACE 77.19(d) A height exceeding an approach surface of RUNWAY 02. THE BEARING TO THE CASE FROM THE THRESHOLD IS...... 259.142 degrees

THE ABEAM BEARING TO THE CENTERLINE IS...... 92.91 degrees

THE CENTERLINE OUTBOUND TRUE BEARING IS...... 182.91 degrees

THE RUNWAY THRESHOLD ELEVATION IS...... 6.3 ft. AMSL

THE DISTANCE FROM THRESHOLD + 200' TO THE CASE IS... 43869.617 ft.

THE DISTANCE FROM THRESHOLD + 200' TO NB IS...... 10440.73 ft.

THE ABEAM DISTANCE TO CENTERLINE FROM CASE IS...... 42628 ft.

******* DOES NOT EXCEED ********* BEYOND DEFINED APPROACH & TRANSITIONAL AREAS. DISTANCE FROM THE THRESHOLD TO OFFSET IS...... 10640.68 ft. THE SLOPE OF RUNWAY 02 IS: 50 TO 1. The FAA has defined this runway as a non-utility runway. It has a precision approach. The obstacle surface extends 50,000 feet with a 50:1 Slope for the first 10,000 feet and a 40:1 Slope for 40,000 feet. The obstacle approach surface is centered symmetrically along the runway centerline extended. Please review the US Terminal Procedures volume associated with this airport. If a procedure for this airport and/or runway exist use Terps® Professional software to determine the height limits (if any) the procedure will have on the proposed structure. Precision instrument procedures will have the greatest impact between the final approach fix (FAF) and the runway end. The FAF is located approximately 5 NM from the runway end. This type of approach usually has a non-precision and a circling approach also. A circling approach to the airport or runway can extend out up to 4.5 NM from every runway end. ******* * BEGIN RUNWAY ANALYSIS * ******* EXISTING RUNWAY 14/32 77.19(c) A height exceeding runway primary surface. ******* DOES NOT EXCEED ********* NOT WITHIN SPECIFIED RUNWAY PRIMARY SURFACE 77.19(e) A height exceeding a transitional surface abeam runway. ******* DOES NOT EXCEED ******** NOT WITHIN SPECIFIED RUNWAY ABEAM TRANSITIONAL SURFACE 77.19(d) A height exceeding an approach surface of RUNWAY 14. THE BEARING TO THE CASE FROM THE THRESHOLD IS...... 253.427 degrees THE ABEAM BEARING TO THE CENTERLINE IS...... 221.19 degrees THE CENTERLINE OUTBOUND TRUE BEARING IS...... 311.19 degrees THE ABEAM DISTANCE TO CENTERLINE FROM CASE IS...... 37343.3 ft. THE RUNWAY THRESHOLD ELEVATION IS...... 4.9 ft. AMSL THE DISTANCE FROM THRESHOLD + 200' TO THE CASE IS... 44199.526 ft.

THE CRITICAL WIDTH OF HALF THE APPROACH IS...... 2066.103 ft.

The FAA has defined this runway as a non-utility runway. It has a visual approach. The obstacle surface extends 5000 feet (20:1 Slope) symmetrically centered along the runway centerline extended. This airport may have a circling approach. Please review the US Terminal Procedures volume associated with this airport. If a procedure for this airport and/or this runway exist use Terps® Professional software to determine the height limits (if any) the procedure will have on the proposed structure. A circling approach to the airport or any runway can extend out up to 4.5 NM from every runway end.

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08-20-2019 09:52:18

Airspace User: Kristina Pittman

File: 2019-APS-2531-OE

LATITUDE: 41°-13'-58.54" LONGITUDE: 73°-02'-41.89"

SITE ELEVATION AMSL..... 37 ft. STRUCTURE HEIGHT......126 ft. OVERALL HEIGHT AMSL.....163 ft.

FACIL			BEARING	DISTANCE	DELTA ARP	FAR
IDENT	TYP	NAME	To FACIL	IN N.M.	ELEVATION	P77
BDR	AIR	IGOR I SIKORSKY MEMORIAL	221.34	5.561	+154.5	YES

This facility has at least one runway over 3,200 feet in length.

Your structure DNE FAR 77.9(a) or 77.9(b) Notice Criteria for this airport. However, you may EXCEED other Notice Standards. As a minimum, please review reports for FAR Part 77 Obstruction Surfaces, Air Navigation and Communication facilities.

You are 31910 feet from the nearest runway threshold and the threshold elevation is 6 feet. Please review runway analysis for remaining airport surfaces.

This airport has both Circling and Straight-In Instrument Procedures. Please review published US Terminal (TERPS®) Approach Procedures for this landing facility.

Possible Exceeds FAR 77.9 IFR for BDR Rwy 24, TERPS analysis required.

Category 'D' Circling Approach Area extends 3.78 NM from each runway.

FACIL			BEARING	DISTANCE	DELTA ARP	FAR
IDENT	TYP	NAME	To FACIL	IN N.M.	ELEVATION	P77
HVN	AIR	TWEED-NEW HAVEN	75.42	7.401	+150.4	YES

This facility has at least one runway over 3,200 feet in length.

Your structure DNE FAR 77.9(a) or 77.9(b) Notice Criteria for this airport. However, you may EXCEED other Notice Standards. As a minimum, please review reports for FAR Part 77 Obstruction Surfaces, Air Navigation and Communication facilities.

You are 43917 feet from the nearest runway threshold and the threshold elevation is 6 feet. Please review runway analysis for remaining airport surfaces.

This airport has both Circling and Straight-In Instrument Procedures. Please review published US Terminal (TERPS®) Approach Procedures for this landing facility.

DNE 77.9 IFR Straight-In Notice Criteria HVN

Category 'D' Circling Approach Area extends 3.78 NM from each runway.

FACIL			BEARING	DISTANCE	DELTA ARP	FAR
IDENT	TYP	NAME	To FACIL	IN N.M.	ELEVATION	P77
OXC	AIR	WATERBURY-OXFORD	344.53	15.271	-567.1	YES

This facility has at least one runway over 3,200 feet in length.

Your structure DNE FAR 77.9(a) or 77.9(b) Notice Criteria for this airport. However, you may EXCEED other Notice Standards. As a minimum, please review reports for FAR Part 77 Obstruction Surfaces, Air Navigation and Communication facilities.

You are 89884 feet from the nearest runway threshold and the threshold elevation is 679 feet. Please review runway analysis for remaining airport surfaces.

This airport has Instrument Procedures. Please review published US Terminal (TERPS®) Approach Procedures for this landing facility to determine impact.

FACIL			BEARING	DISTANCE	DELTA ARP	FAR
IDENT	TYP	NAME	To FACIL	IN N.M.	ELEVATION	P77
4C3	HEL	YALESVILLE	34.15	18.785	+98	YES

Your structure DOES NOT EXCEED FAR 77.9(b)(3) Notice Criteria for this heliport. You are not locating within 5,000 feet of facility. You are beyond limit by: 109139.5 feet.

FACIL			BEARING	DISTANCE	DELTA ARP	FAR
IDENT	TYP	NAME	To FACIL	IN N.M.	ELEVATION	P77
MMK	AIR	MERIDEN MARKHAM MUNI	30.42	19.186	+60	YES

This facility does not have a runway over 3,200 feet in length.

Your structure DNE FAR 77.9(a) or 77.9(b) Notice Criteria for this airport. However, you may EXCEED other Notice Standards. As a minimum, please review reports for FAR Part 77 Obstruction Surfaces, Air Navigation and Communication facilities.

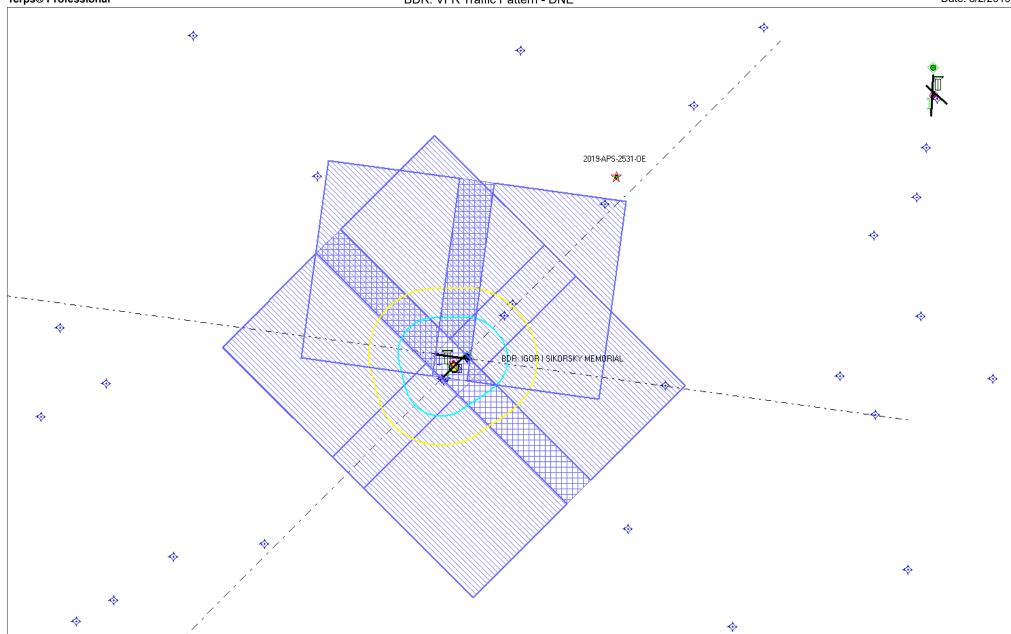
You are 115590 feet from the nearest runway threshold and the threshold elevation is 99 feet. Please review runway analysis for remaining airport surfaces.

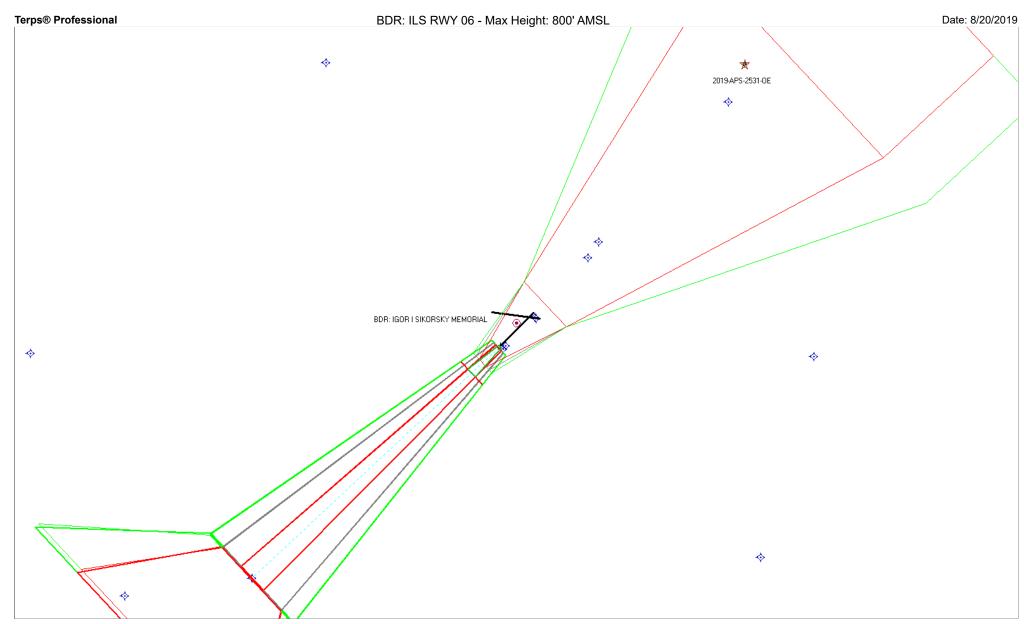
This airport has Instrument Procedures. Please review published US Terminal (TERPS®) Approach Procedures for this landing facility to determine impact.

FACIL			BEARING	DISTANCE	DELTA ARP	FAR
IDENT	TYP	NAME	To FACIL	IN N.M.	ELEVATION	P77
DXR	AIR	DANBURY MUNI	292.96	21.452	-293.7	YES

This facility has at least one runway over 3,200 feet in length.







PRECISION LANDING SYSTEM - PROCEDURE ANALYSIS

*** 2019-APS-2531-OE ***

IGOR I SIKORSKY MEMORIAL - Runway: 06

Time: 12:06:24 Date: 08-20-2019

STUDY OBJECT DATA

Latitude: 41° 13' 58.54" Longitude: 73° 2' 41.89"

Ground Elevation: 37' AMSL

AGL Height: 126' AGL Overall Elevation: 163' AMSL

PRECISION INSTRUMENT APPROACH PROCEDURE ANALYSIS

Along Track Distance: feet.

Abeam Distance: feet.

PROCEDURE: DNE OCS

MISSED APPROACH PROCEDURE (MAP) ANALYSIS

Along Track Distance: 30325.7 feet.

Abeam Distance: 3868.85 feet.

MISSED APPROACH: DNE MAS

PRECISION PROCEDURE DATA

OCS Origin Latitude: 41° 9' 23"

OCS Origin Longitude: 73° 7' 56.892"

FAF Latitude: 41° 5' 41.12"

FAF Longitude: 73° 13' 12.54"

Course Heading (T): 59.9°

Distance to FAF: 5

DECISION ALTITUDE (DA) DATA

DA Latitude: 41° 8' 59.6125"

DA Longitude: 73° 8' 31.4704"

TDZE: 7'AMSL

Decision Height: 257' AMSL

TCH: 51 feet

Glide Slope Angle: 3 degrees

LTP Elevation: 5.7' AMSL

GPI: 973.1 feet

Calculated DA: feet Maximum AMSL: DNE feet

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The mathematical algorithms used by this program are derived directly from Federal Aviation Administration (FAA) Orders on Instrument Flight Procedures.

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PRECISION LANDING SYSTEM - PROCEDURE ANALYSIS

*** 2019-APS-2531-OE ***

IGOR I SIKORSKY MEMORIAL - Runway: 06

Time: 12:03:07 Date: 08-20-2019

STUDY OBJECT DATA

Latitude: 41° 13' 58.54" Longitude: 73° 2' 41.89"

Ground Elevation: 37' AMSL

AGL Height: 126' AGL Overall Elevation: 163' AMSL

PRECISION INSTRUMENT APPROACH PROCEDURE ANALYSIS

Along Track Distance: feet.

Abeam Distance: feet. PROCEDURE: DNE OCS

MISSED APPROACH PROCEDURE (MAP) ANALYSIS

Along Track Distance: 30325.7 feet.

Abeam Distance: 3868.85 feet.

MISSED APPROACH: DNE MAS

PRECISION PROCEDURE DATA

OCS Origin Latitude: 41° 9' 23"

OCS Origin Longitude: 73° 7' 56.892"

FAF Latitude: 41° 5' 41.12"

FAF Longitude: 73° 13' 12.54"

Course Heading (T): 59.9°

Distance to FAF: 4.5

DECISION ALTITUDE (DA) DATA

DA Latitude: 41° 8' 59.6125"

DA Longitude: 73° 8' 31.4704"

TDZE: 7'AMSL

Decision Height: 257' AMSL

TCH: 51 feet

Glide Slope Angle: 3.00 degrees

LTP Elevation: 5.7' AMSL

GPI: 973.1 feet

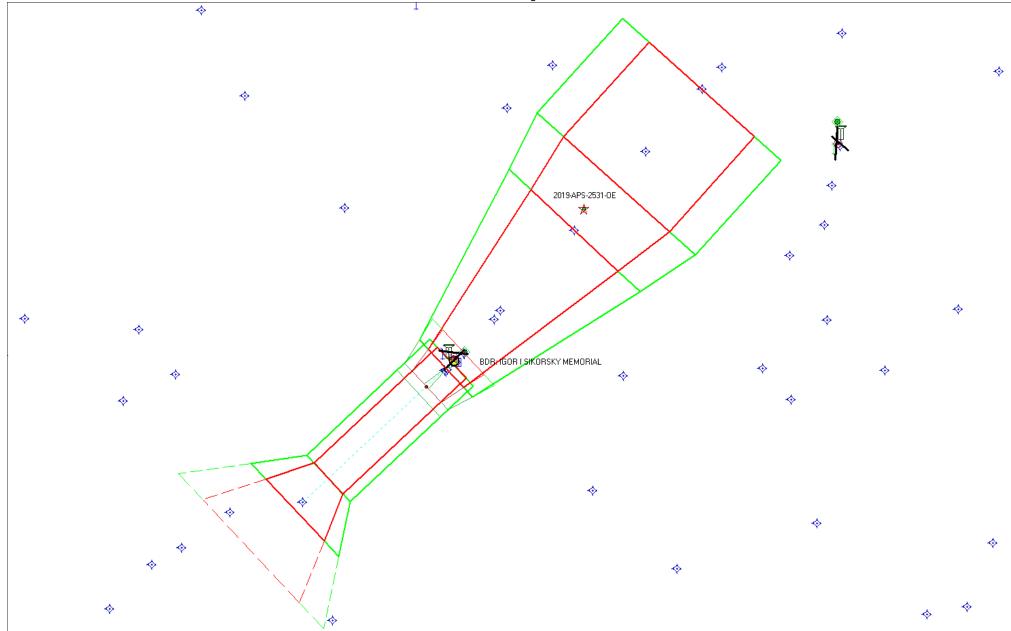
Calculated DA: feet Maximum AMSL: DNE feet

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VNAV Procedure

*** 2019-APS-2531-OE ***

BDR Runway: 06

Date: 08-20-2019 Time: 12:08:59

STUDY OBJECT DATA

Study Latitude: 41° 13' 58.54" Study Longitude: 73° 2' 41.89"

Ground Elevation: 37' AMSL AGL Height: 126' AGL

Overall Elevation: 163' AMSL

INSTRUMENT APPROACH PROCEDURE (IAP) ANALYSIS

Along Track Distance: 0 feet.
Abeam Distance: 0 feet.

PROCEDURE: Maximum AMSL: 1015.92 ft

PROCEDURE: FAS: DNE

PROCEDURE: Object not within FSL Extension Area.

PROCEDURE: DNE GQS

PROCEDURE: OCS Slope: 23.439:1

MISSED APPROACH PROCEDURE (MAP) ANALYSIS

MAP Along Track Distance: 40670.89 feet.

Abeam Distance: 903.44 feet.

Flat Surface Length: 4555.27 feet FSL Altitude: 112 feet AMSL.

MISSED APPROACH: MAS Max AMSL: 1015.92' AMSL (Primary).

PROCEDURE DATA

OCS Origin Latitude: 41° 9' 38.088"

OCS Origin Longitude: 73° 7' 38.172" FAF Latitude: 41° 5' 41.12"

FAF Longitude: 73° 13' 12.54"

In Bound Course Heading: 59.8°
Distance to FAF: 4.5 NM

Distance to Docs: 5938.5' feet

DECISION HEIGHT (DH) DATA

DH Latitude: 41° 8' 57.507"
DH Longitude: 73° 8' 34.449"

TDZE: 7'AMSL

Decision Height: 273' AMSL

TCH: 51 feet

Glide Slope Angle: 3.00°

Rwy Threshold Elevation: 5.7' AMSL

GPI: 4127 feet

Aircraft Category: D

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Departure Runway 06

*** 2019-APS-2531-OE ***

IGOR I SIKORSKY MEMORIAL - Runway: 06
Date: 08-20-2019 Time: 12:12:04

STUDY OBJECT DATA

Study Latitude: 41° 13' 58.54" N
Study Longitude: 73° 2' 41.89" W
Ground Elevation: 37' AMSL ft.
AGL Height: 126' AGL ft.
Overall Elevation: 163' AMSL ft.

INSTRUMENT DEPARTURE ANALYSIS

Initial Climb Area (ICA): DNE ICA

Diverse Departure A Inside Diverse A - Max Hgt: 802 ft

Diverse Departure B Not in Diverse B - DNE Diverse B

The above analysis is in accordance with FAA Order 8260.3B Change 26. This analysis used a 200 ft/NM climb gradient (CG) and an Obstacle Clearance Surface (OCS) that provides 47 feet of obstacle clearance at 1 NM from the Departure End of Runway (DER). Some runways have published climb gradients greater than 200 ft/NM. A specified climb gradient greater than standard (200 ft/NM) is sometimes necessary to allow acceptable obstacle clearance. Should your location exceed the value indicated above you may need to determine if there is a published CG and conduct additional calculations to determine if the CG will provide proper clearance for your proposed structure.

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POINT ELEVATION DATA

SRTM GROUND ELEVATION DATA North American Datum 1983 North American Vertical Datum 1988 - NAVD88

2019-APS-2531-OE FOREST_HEIGHTS_CT

Latitude: 41° - 13' - 58.54" N **Decimal Degrees:** 41.2329277777778° **Longitude:** 73° - 02' - 41.89" W **Decimal Degrees:** 73.0449694444444°

Ground Elevation: 41.28 Feet AMSL

This certifies the Digital Elevation Model (DEM) value for the specified latitude/longitude point was obtained from the SRTM Endeavour radar mission of February 2000. NASA has released the finished version edited by the National Intelligence Agency. The elevation value meets vertical accuracy criteria as specified by FAA Order 8260.19C, Appendix 2, Obstacle Accuracy Standards, Codes And Sources, paragraph 101 for Code 'C'. The elevation value for the specified latitude/longitude is accurate to within ±20 feet vertically.

Date Printed: 08-01-2019