

Saratoga County Airport

AIRPORT MASTER PLAN UPDATE DRAFT CHAPTER 2 INVENTORY

Prepared for:

SARATOGA COUNTY DEPARTMENT OF PUBLIC WORKS



Submitted By:



60 Railroad Place, Suite 402
Saratoga Springs, NY 12866
www.mjinc.com

May 2014

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Chapter 2

Inventory

2.0 INTRODUCTION

Chapter 2 presents the base information about the Airport, describing the Airport owner, the role of the Airport, and information on aviation activity, airside and landside facilities, and land use and zoning. This chapter is organized in the following sections:

- Airport Background
- Airport Activity
- Airside Facilities
- Landside Facilities
- Landuse and Socioeconomic Data
- Airspace

2.1. AIRPORT BACKGROUND

2.1.1. Airport Sponsor

The Saratoga County Department of Public Works (SCDPW) is the recognized Sponsor of Saratoga County Airport (5B2) by the Federal Aviation Administration (FAA). The primary function of the SCDPW is to maintain the County owned roads, bridges, grounds and building facilities within the County. The SCDPW has been operating the Airport since the Airport was turned over to the County in the late 1960's.

2.1.2. Role, Classification

The FAA classifies airports that are within the National Plan of Integrated Airports System (NPIAS). The NPIAS is the FAA's report to Congress defining the system of airports in the United States and quantifying the system's capital needs. The NPIAS classifies airports as one of the following airport types; Commercial Service, General Aviation or Reliever. Commercial Service airports have air passenger service provided by legacy carriers, regional airlines or scheduled charter services. Airports without Commercial Service are classified as General Aviation airports. Reliever airports are a subset of General Aviation airports and "relieve" congested commercial service airports by providing an alternate landing airport for corporate and general aviation activity.

New to the NPIAS in 2003 is a further classification of General Aviation airports based upon types of use and the number of based aircraft. The four categories are described in the following bullets:



- National – airports that provide communities access to national and international destinations and have 200 based aircraft, including 30 jets.
- Regional – these airports provide access to regional and national markets and have 90 based aircraft, including three jets.
- Local – access by these airports is to the local and regional markets and have 33 based propeller driven aircraft and no jets.
- Basic – support general aviation activity critical to the local community and have 10 based propeller driven aircraft and not jets.

The 2013-2017 NPIAS currently classifies Saratoga County Airport as a public airport falling within the Regional category. The service level for the Airport is General Aviation and the designation will remain over the next 5 years. The NPIAS identifies a 2013-2017 development cost of \$4.4 million over this time period.

2.1.3. Airport Location

Saratoga County Airport is within the County of Saratoga, which is comprised of 27 individual Cities, Towns and Villages. The Airport lies within the Town of Milton, which is located in the eastern portion of the State along Interstate 87 (the Northway). Neighboring Towns include the City of Saratoga Springs and the Village of Ballston Spa. The Town of Milton is about 3 miles southwest of Saratoga Springs and 2 miles north of Ballston Spa, which is a Village located within the Town of Milton. The Airport's coordinates are N43° 03.04' and W73° 51.70'. Figure 2-1 shows the location of the Airport within the surrounding community.

2.1.4. Airport Access

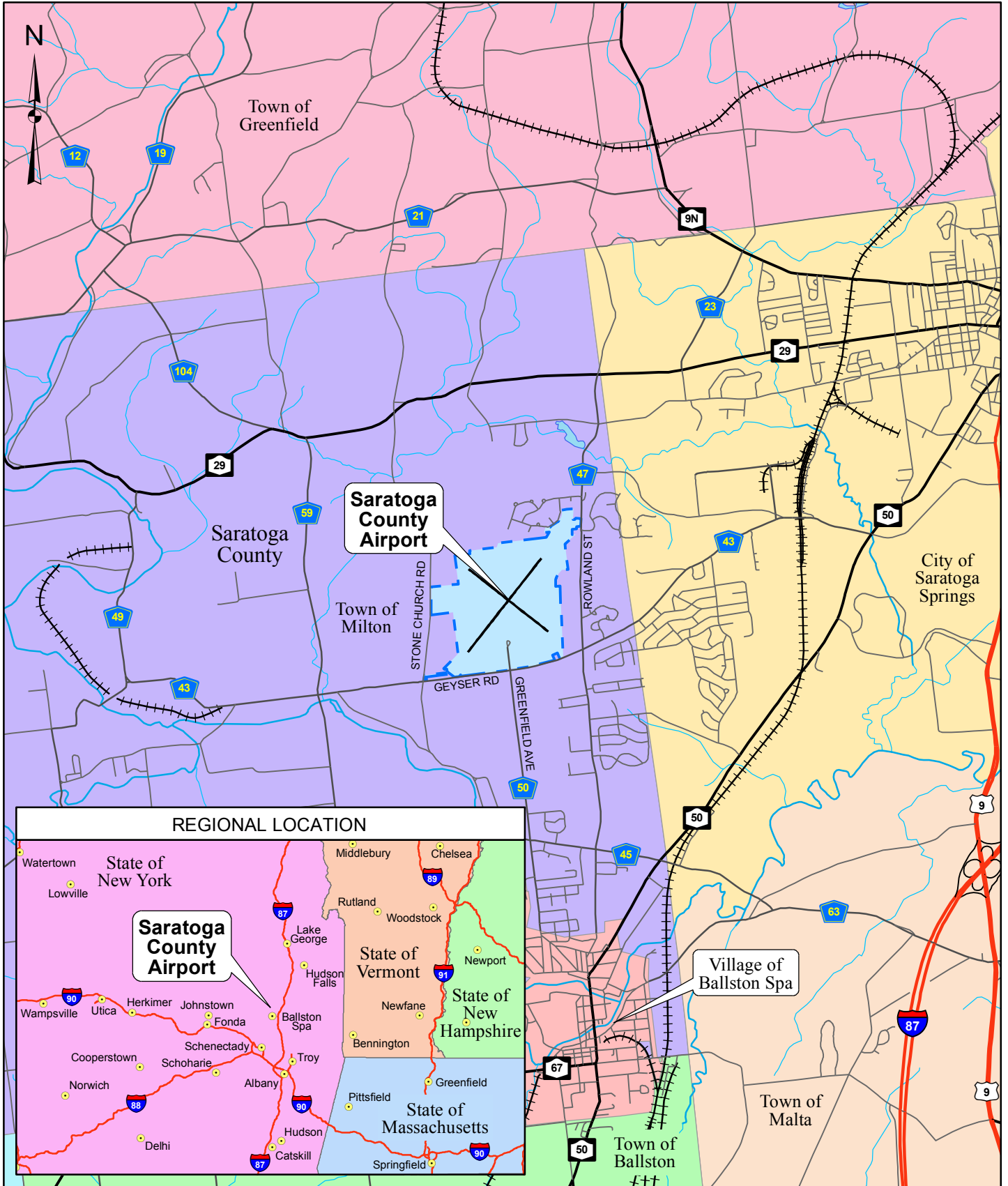
The Airport can be accessed from several directions. The Airport is about five road miles southwest of the City of Saratoga and about five road miles west of Interstate 87. The Airport can be accessed from the City of Saratoga via State Route 50 to County Route 43 (Geyser Road) or from Exit 13 to State Route 9 to Old Post Road to County Route 45 and then onto County Route 50, which ends at the Airport.

2.1.5. Airport Service Area/ Nearby Airports (Facility Comparison)

General Aviation airport service areas are typically a thirty-minute drive time to the airport. For purposes of this effort, a 30 nautical mile (nm) radius was used for the airport. Using this radius, there are 16 other public use airports within a 30 nm radius of Saratoga County Airport. These include Warren County Airport (17.3 nm) to the north, Albany International Airport (20.1 nm) and Schenectady County Airport (15.2 nm) to the south and Fulton County Airport (24.4 nm) to the west. Table 2-1 provides a brief summary of comparable airports and Figure 2-2 depicts the surrounding airports.

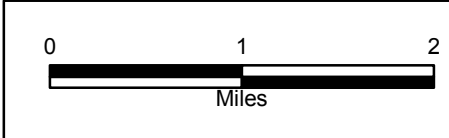
AIRPORT LOCATION

FIGURE 2-1



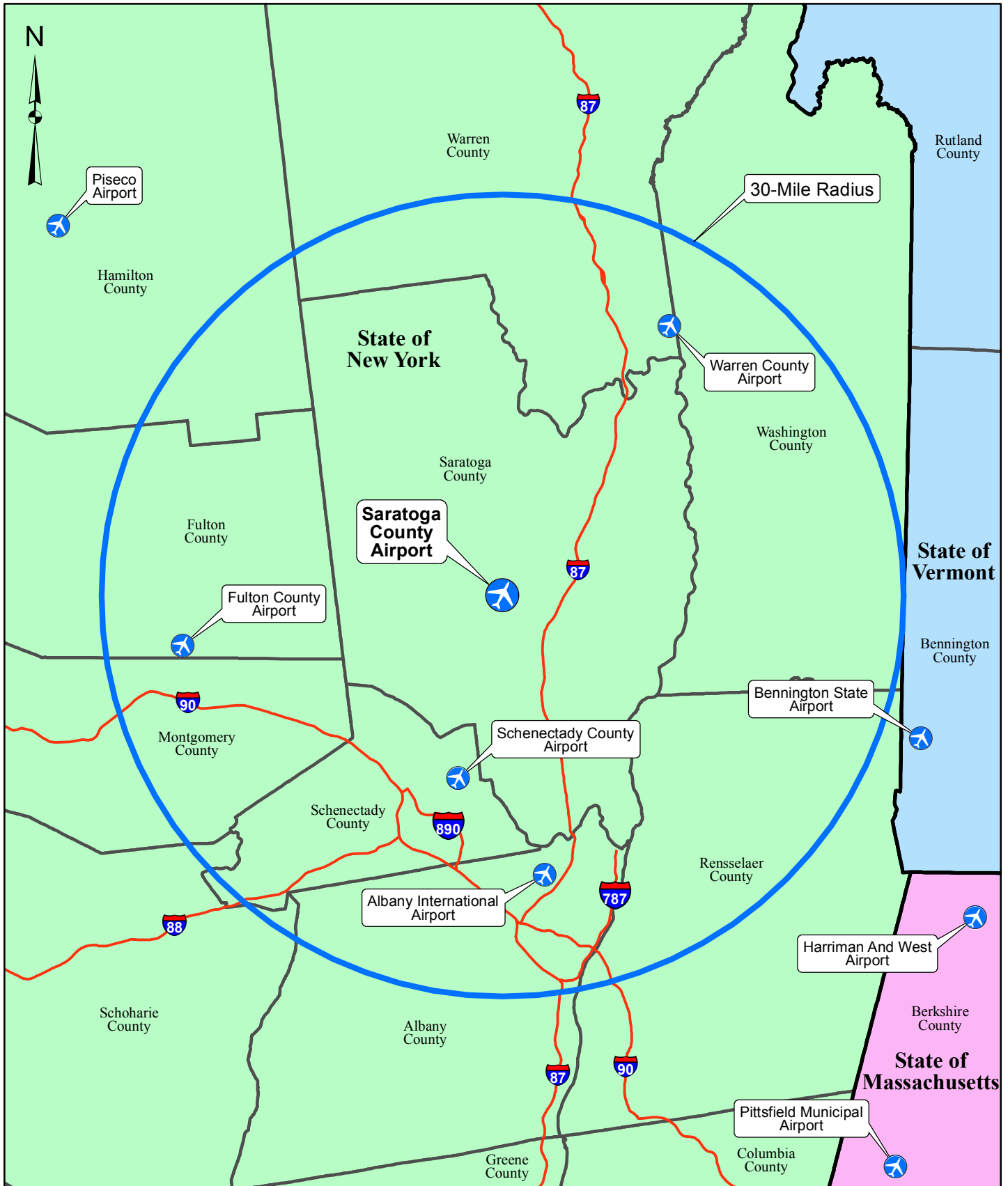
K:\SARATOGAT-17588-04 Saratoga AMP\Draw\GIS\LOCATION.mxd

**SARATOGA
COUNTY
AIRPORT**



AIRPORT SERVICE AREA

FIGURE 2-2



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**SARATOGA
COUNTY
AIRPORT**



 **McFarland Johnson**

Table 2-1 – Adjacent Airports

Airport	Runways	Approaches	Fuel	FBO Facilities
Saratoga County (NY) (5B2)	5-23 4,699' x 100' 14-32 4,000' x 100'	RNAV (GPS) RW 05, 23 VOR DME-A	100LL Jet-A	
Albany County (NY) (ALB)	01/19 5,000' x 150' 10/28 7,200' x 150'	ILS OR LOC RW 01, 19 ILS (CAT II) RW 01 RNAV (RNP) RW 01, 19 RNAV (GPS) RW 01, 19, 10, 28 VOR RW 28	100LL Jet-A	Yes
Schenectady County (NY) (SCH)	04/22 7,000' x 150' 10/28 4,850' x 150' 15/33 2,864' x 50'	ILS OR LOC RW 04 RNAV (GPS) RW 04, 10, 22, 28 NDB RW 22	100LL Jet-A	Yes
Glenns Falls (NY) (GFL)	01/19 5,000' x 150' 12/30 3,999' x 100'	ILS OR LOC RW 01 RNAV (GPS) RW 01, 12, 19, 30	100LL Jet-A	Yes
Fulton County (NY) (NY0)	10/28 4,000 x 75'	RNAV (GPS) RW 10, 28 NDB RW 10, 28	100LL Jet-A	Yes

Source: McFarland Johnson, Airnav

2.1.6. Airport Tenants

There are currently three tenants at Saratoga County Airport. A summary of the tenants is provided below.

North American Flight Services (NAFS) – NAFS is the current Fixed Based Operator (FBO) at the Airport and serves as the day-to-day airport manager for the County. NAFS provides fuel (100 Low Lead and Jet-A), hangar storage for based and transient aircraft, transient aircraft parking and aircraft airframe, power plant and avionics maintenance services. NAFS owns the main hangar located in the southwest corner of the Airport and leases from the County two conventional hangars and two multi-aircraft T-hangars. They also lease and manage the based aircraft tiedowns along Taxiway C.

Saratoga Soaring Association (SSA) – SSA was established in 1983 and currently operates from a hangar located on the southeasterly side of the Airport along Taxiway C. The SSA has five gliders, a Pawnee tow plane and a two-seat glider (Grob 103) and provides flight instruction, and soaring services (e.g. tow plane, etc.). Association members also have private sailplanes they store and operate from their hangar facility. Sailplane operations occur between March and November.

Adirondack Soaring Association (ASA) – ASA recently built a new hangar facility south of SSA’s hangar facility in the southwest corner of the Airport along Taxiway C. ASA has 60 members and provides a range of services similar to SSA. The association has six sailplanes and three tow planes:

- Blanik L-13 (2)
- Blanik L-23 (2)
- Grob 103 III
- Scempp-Hirth Duo Discus
- Citabria (tow plane)
- Pawnee (2) (tow plane)

2.2. AIRPORT ACTIVITY

2.2.1. Based Aircraft / Users

Based aircraft are aircraft that base at an airport over an extended period of time. Based aircraft at Saratoga County Airport are located in several conventional box hangars, T-hangars and the based aircraft apron along Taxiway C.

Historical data on based aircraft is available from the FAA’s 5010 form, the FAA’s Terminal Area Forecasts as well as the 2003 Master Plan and the New York State Airport System Plan (NYSASP) dated 2008. Table 2-2 presents the TAF’s historical counts from 1990 through 2011.

The FAA’s Based Aircraft Registry identified 47 based aircraft for late 2011, which is more accurate than the 2011 data shown in Table 2-2. Discussions with NAFS identified 55 based aircraft at the Airport in 2013.

Not counted in the total based aircraft count, however, are helicopters and gliders. The current FAA 5010 Form indicates there is one helicopter and 16 gliders. Information from NAFS confirmed the single helicopter and information from the glider associations’ websites confirmed there were 10 gliders. The glider count anomaly may be related to additional gliders based at the Airport during the soaring season.

Table 2-2 – Historical TAF Data

Year	Based Aircraft
1990	78
1991	78
1992	78
1993	78
1994	68
1995	68
1996	68
1997	69
1998	69
1999	69
2000	69
2001	69
2002	69
2003	69
2004	69
2005	69
2006	69
2007	69
2008	70
2009	70
2010	38
2011	44
2012	45

Source: 1990-2001 FAA TAF, 2012 FAA 5010

2.2.2. Existing / Recent Operational Activity

Operations at General Aviation airports are comprised of two types - local operations and itinerant operations. Local operations are generated primarily by based aircraft at the airport. Local operations are also often defined as flights that fly within 20 miles of the airport. Itinerant operations are all other operations at the airport and are comprised of aircraft that fly to the airport from another airport.

Operations at Saratoga County Airport are not counted on a daily basis, as there is no air traffic control tower and no mechanism to count aircraft during the day or evening hours. Typically, aircraft operations are estimated by the airport manager and reported to the FAA annually. The historical data provided in the FAA TAF shows operations at 38,550 from 1990 through 2011 and the 2012 FAA 5010 shows the same activity level.

Reviewing the historical data from the previous Master Plan and updating information up to the 2008 NYSASP, the following operational estimates were noted:

- 1989 Master Plan - 50,700 operations
- 1995 NYSASP – 39,360 operations



- 2003 Master Plan - 38,550 operations
- 2008 NYSASP - 38,550 operations

The information, excluding the 1989 Master Plan, shows approximately 38,550 annual operations. Discussions with NAFS have indicated that Airport activity over the past several years has been steady and may have increased slightly with the improving economy.

Another way in which to gauge activity is to review trends in aviation fuel sales at the Airport. NAFS provided historical data for fuel sales and that information is presented in Table 2-3.

Table 2-3 – Historical Fuel Sales (Gallons Sold)

Year	Total Fuel Sales
2007	174,204
2008	238,602
2009	229,045
2010	227,864
2011	244,895
2012	292,350

Source: 1990-2001 FAA TAF, 2012 FAA 5010

2.3. AIRSIDE FACILITIES

Airside facilities are the areas associated with the takeoff and landing of aircraft. The airside facilities discussed include:

- Runways
- Taxiways
- Aprons
- Instrument Approaches
- Visual Aids

Figure 2-3 presents a graphic of the entire Airport, Figure 2-4 presents the airside facilities described in the following sections.

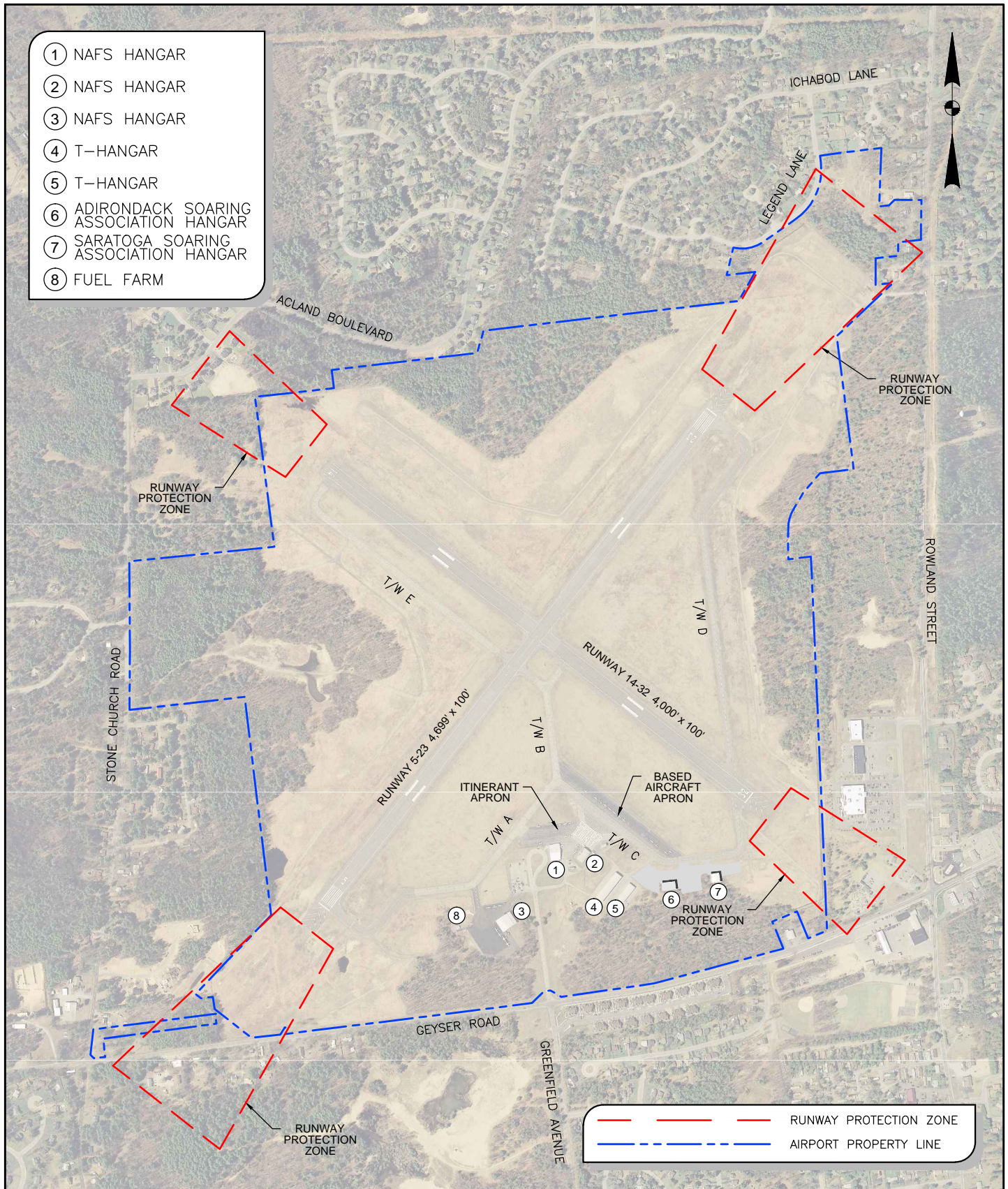
2.3.1. Runways

Runway 5-23

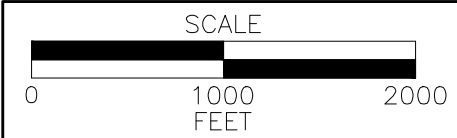
Runway 5-23 is the primary runway at the Airport. The runway is 4,699 feet long and 100 feet wide with 12.5' wide paved shoulders. The runway surface is asphalt and is grooved to provide additional drainage of water from the runway. The grooved runway provides additional stopping performance for the corporate jet aircraft that use the Airport year round.

EXISTING AIRPORT FACILITIES

FIGURE 2-3

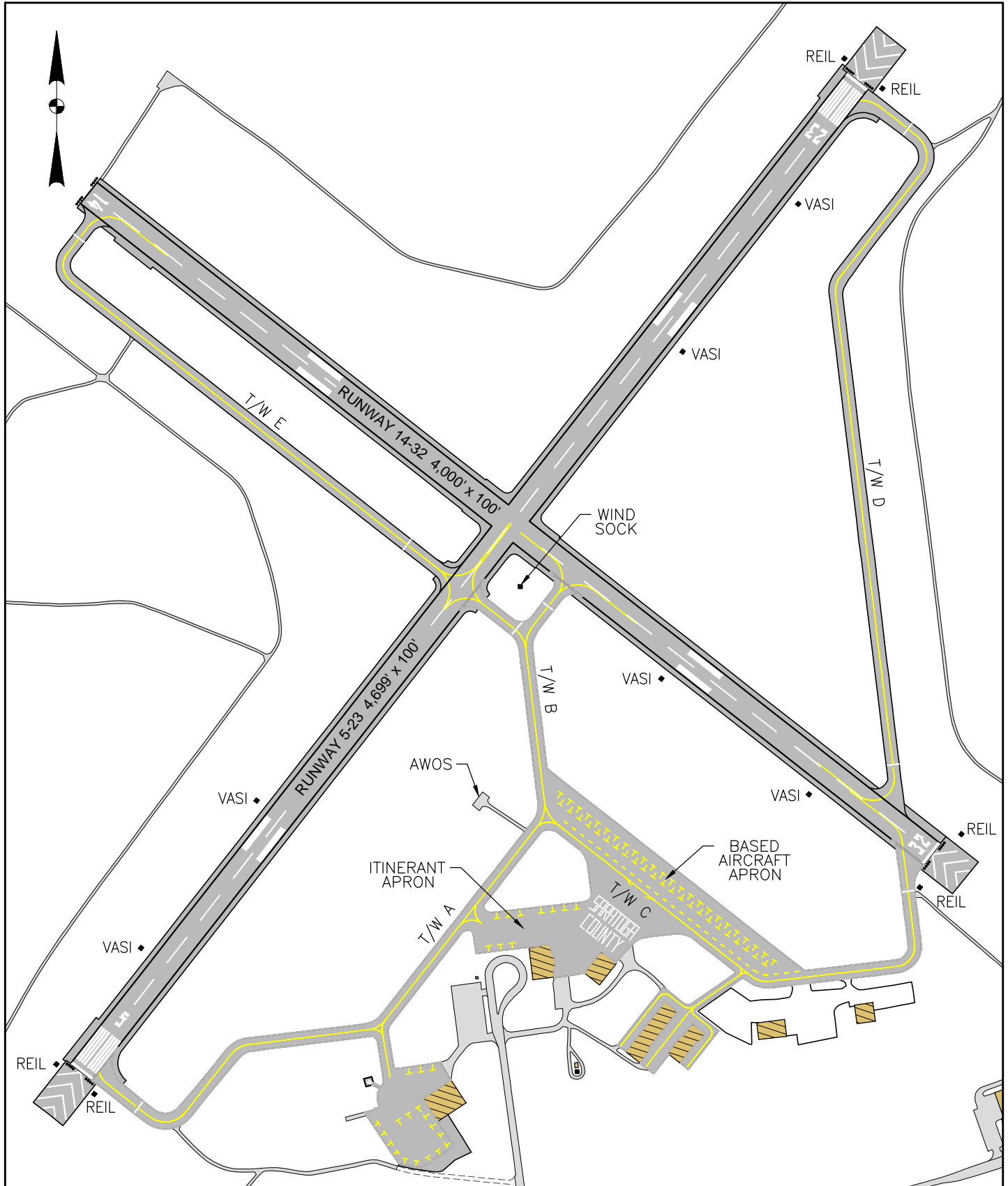


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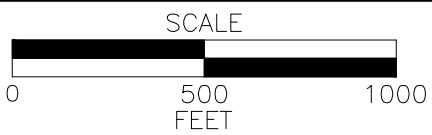


AIRSIDE FACILITIES

FIGURE 2-4



**SARATOGA
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The runway was reconstructed in 2000 and is in good condition.

The runway is marked with non-precision markings at both runway ends, all of which are in poor condition. The runway is lighted with Medium Intensity Runway Lights (MIRLS). The runway also has a four box Visual Approach Slope Indicator (VASI) for each runway end, however only the Runway 23 VASI is operational. Both VASI units are to be replaced with new Precision Approach Path Indicators (PAPI) in 2014 as part of a visual aids upgrade project for the Airport. Both runway ends also have Runway End Identifier Lights (REILS), which are flashing strobes demarcating the end of the runway. Table 2-4 summarizes Runway 5-23.



Table 2-4 – Runway 5-23

Runway 5-23		
Runway Dimensions	4,699' x 100'	
Surface	Asphalt (Grooved)	
Runway Edge Lights	MIRL	
Pavement Condition	Good	
Pavement Design Strength	30,000 lbs. (single-wheel)	
	Runway 05	Runway 23
Runway Heading	053 ^o Magnetic	233 ^o Magnetic
Approach End Latitude	43 ^o 02' 43.54"N	43 ^o 03' 19.86"N
Approach End Longitude	73 ^o 52' 02.51"W	73 ^o 51' 23.10"W
Approach End Elevation	433.8'	426.8'
Runway Gradient	-0.1%	0.1%
Visual Slope Indicator	4-Box VASI ¹ (left)	4-Box VASI ¹ (left)
Visual Glide Path Angle	3.0 ^o	3.0 ^o
Threshold Crossing Height	46'	45'
Runway End Identification Lights	Yes	Yes
Touchdown Point Elevation	433'	432'
Approach	Non-Precision	Non-Precision
Markings	Non-Precision	Non-Precision
Traffic Pattern	Left	Left
Obstructions	Trees	Trees

^{1/} VASI to be replaced with PAPI in 2013
 Source: FAA 5010, McFarland Johnson

Runway 14-32

Runway 14-32 is the crosswind runway and is 4,000 feet long and 100 feet wide with 12.5' wide paved shoulders. The runway surface is asphalt pavement and is in good condition as it was



reconstructed in 2003. The runway is marked with non-precision markings, which are in poor condition.

The runway is lighted with Medium Intensity Runway Lights (MIRLS). Runway End 32 has a four box VASI, which will also be replaced by a PAPI and REILS in the 2015 timeframe. Runway 14 does not have any visual aids as it is the least used runway end. Table 2-5 presents information on Runway 14-32.

Table 2-5 – Runway 14-32

Runway 5-23		
Runway Dimensions	4,000' x 100'	
Surface	Asphalt (Grooved)	
Runway Edge Lights	MIRL	
Pavement Condition	Good	
Pavement Design Strength	30,000 lbs. (single-wheel)	
	Runway 05	Runway 23
Runway Heading	143 ^o Magnetic	323 ^o Magnetic
Approach End Latitude	43 ^o 03' 15.94"N	43 ^o 02' 51.33"N
Approach End Longitude	73 ^o 52' 01.79"W	73 ^o 51' 19.65"W
Approach End Elevation	437.6'	425.6'
Runway Gradient	-0.2%	0.2%
Visual Slope Indicator	N/A	4-Box VASI ¹ (left)
Visual Glide Path Angle	N/A	3.0 ^o
Threshold Crossing Height	N/A	45'
Runway End Identification Lights	No	Yes
Touchdown Point Elevation	433'	432'
Approach	Non-Precision	Non-Precision
Markings	Non-Precision	Non-Precision
Traffic Pattern	Left	Left
Obstructions	Trees	Trees

^{1/} VASI to be replaced with PAPI in 2013
 Source: FAA 5010, McFarland Johnson

2.3.2. Taxiways

The taxiway system at Saratoga County Airport provides access to each runway end. The taxiway system is comprised of five taxiways designated A, B, C, D, and E (see Figure 2-4). The taxiways converge at the existing main terminal area located southwest of the runway intersection. The taxiways at Saratoga County Airport were recently rehabilitated in 2010, replacing the old wearing surface with new asphalt. The taxiway system is lighted with Medium Intensity Taxiway Lighting (MITL); the old lighting systems were replaced in 2013 for all taxiways with new taxiway lights. The components of the taxiway system are presented in Table 2-6.



Table 2-6 – Taxiway Information

Taxiway	A	B	C	D	E
Dimensions	2650'x50'	1900'x50'	1150'x50'	2300'x50'	2000'x50'
Surface	Asphalt	Asphalt	Asphalt	Asphalt	Asphalt
Taxiway Edge Lights	MITL	MITL	MITL	MITL	MITL
Guidance Signs	Yes	Yes	Yes	Yes	Yes
Markings	Basic	Basic	Basic	Basic	Basic
Runway Access	RW 5	Midfield	RW 32	RW 23	RW 14
Pavement Condition	Good	Good	Good	Good	Good

Source: McFarland Johnson

2.3.3. Aprons

There are four aircraft aprons at Saratoga County Airport: the itinerant apron, the based aircraft tiedown apron, the turf glider apron and the NAFS apron.

The based aircraft tiedown apron is used exclusively for based aircraft parking and is located on the northerly side of Taxiway C. The current apron has 47 tiedowns, many of which are used more during the spring to fall time period. The apron pavement is in poor condition, however, the apron will be reconstructed in 2013. As airport design standards have changed since the apron was originally built, the apron will be reconfigured and have 43 tiedowns available for based aircraft.



The itinerant apron is the largest apron and provides transient tiedowns for short-term aircraft parking. There are ten tiedowns available for transient parking and accesses Taxiways A and C. This apron is used to park transient aircraft traveling from another airport. The apron has 10 tiedowns to park aircraft. Pilots and passengers are transported to and from the apron by an NAFS vehicle. The apron was recently reconstructed and is in good condition.

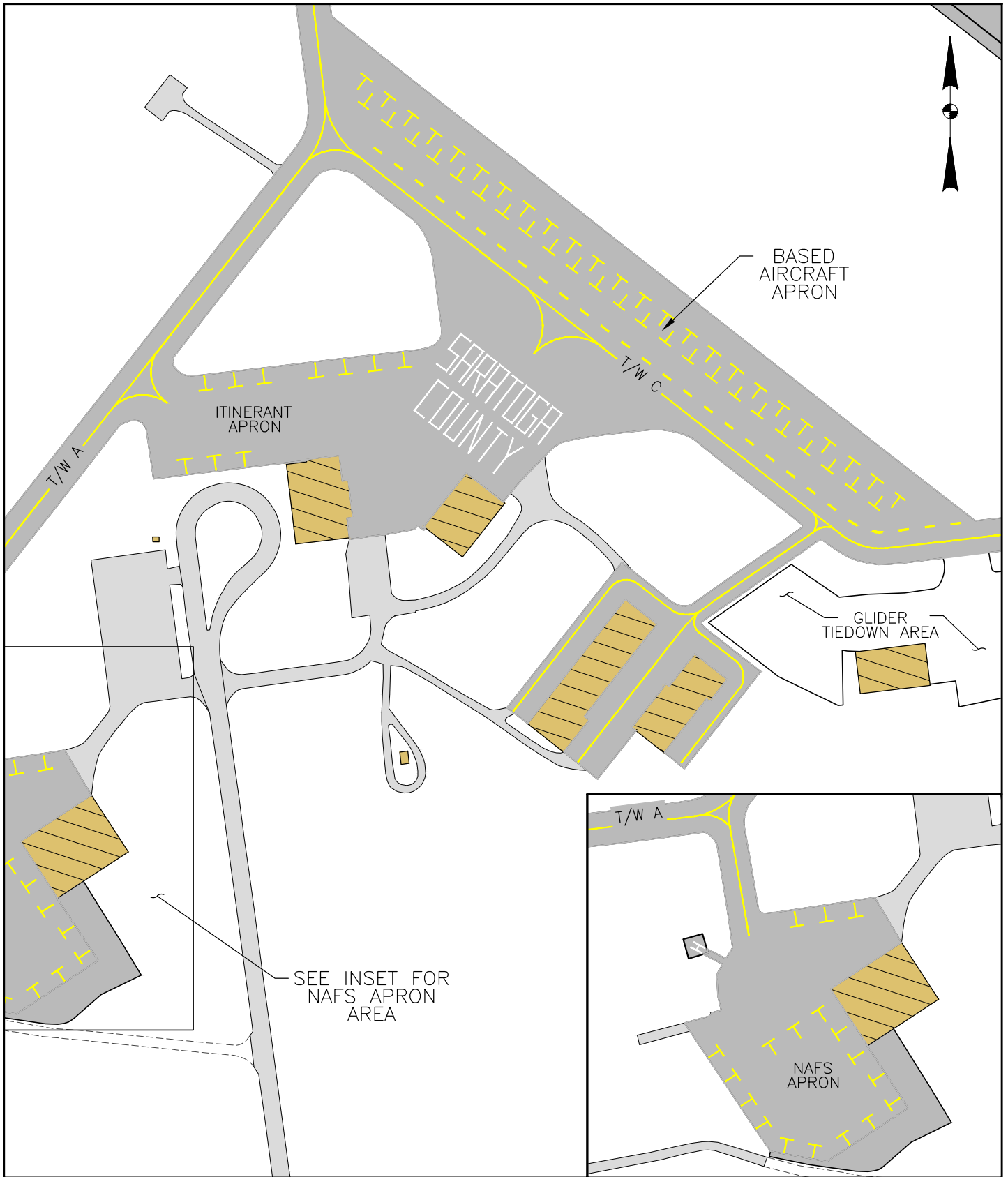
The final apron is located within the two Glider Club lease areas. Both aprons are turf/gravel and meet both Clubs parking and storage needs.

The apron areas are summarized in Table 2-7 and shown in Figure 2-5.

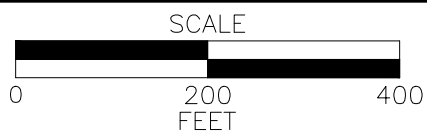
APRON AREAS

FIGURE

2-5



**SARATOGA
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Table 2-7 – Aircraft Parking Aprons

	Itinerant Apron	Tiedown Apron	Glider Apron	North American Apron
Size	15,700 SY ^{1/}	13,450 SY	3,333 SY	4,000 SY
Surface	Asphalt/Turf	Asphalt	Turf	Asphalt
Capacity	10/6	47	6-8	18
Condition	Good	Poor ^{2/}	N/A	Good

1/ SY = Square Yards

2/ The tiedown apron will be reconstructed in 2013 and will be reduced to 43 tiedowns

Source: McFarland Johnson

2.3.4. Instrument Approach Procedures

Instrument Approach procedures provide the ability to land aircraft at Saratoga County Airport during poor weather conditions. Instrument Flight Rules (IFR) weather conditions are defined as less than 3 miles visibility and less than 1,000' cloud height. Instrument procedures use either ground based navigational aids (NAVAIDS) located on or adjacent to the airport and Global Positioning Satellite (GPS) technology to provide guidance to the runway.

Saratoga County Airport has two GPS approaches to Runway 05 and 23. Runway 14-32 is considered a visual runway and has no instrument approaches. The available approaches to Saratoga County Airport are presented in Table 2-8 and shown in Figures 2-6 to 2-8.

Table 2-8 – Instrument Approaches

Procedure	Visibility and Cloud Height Minimums ^{1/}
RNAV (GPS) RW 05	860' MSL / 1 Mile
RNAV (GPS) RW 23	745' MSL / 1 Mile
VOR DME-A	1,260' MSL / 1 Mile

1/ Lowest minimums provided for approach shown

Source: FAA Instrument Approach Charts

2.3.5. Airport Communication and Visual Aids

The Airport is equipped with the following communications and visual aids:

- **Common Traffic Advisory Frequency (CTAF):** Although Saratoga County Airport does not have a control tower, the Airport is equipped with a Common Traffic Advisory Frequency (CTAF) or UNICOM that uses a frequency of 122.8 megahertz to allow communication between pilots flying in the vicinity of the Airport. The CTAF is monitored by North American Flight Services when open. When the Airport is not attended, the open frequency allows pilots to state their positions both on the ground and in the air.

RUNWAY 5 APPROACH

FIGURE

2-6

SARATOGA SPRINGS, NEW YORK

AL-5816 (FAA)

12208

APP CRS	Rwy Idg	4699
052°	THRE	434
	Apt Elev	434

RNAV (GPS) RWY 5

SARATOGA SPRINGS / SARATOGA COUNTY (5B2)

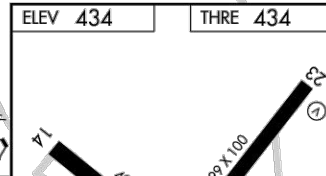
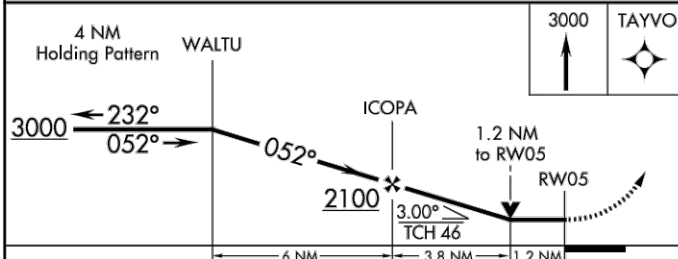
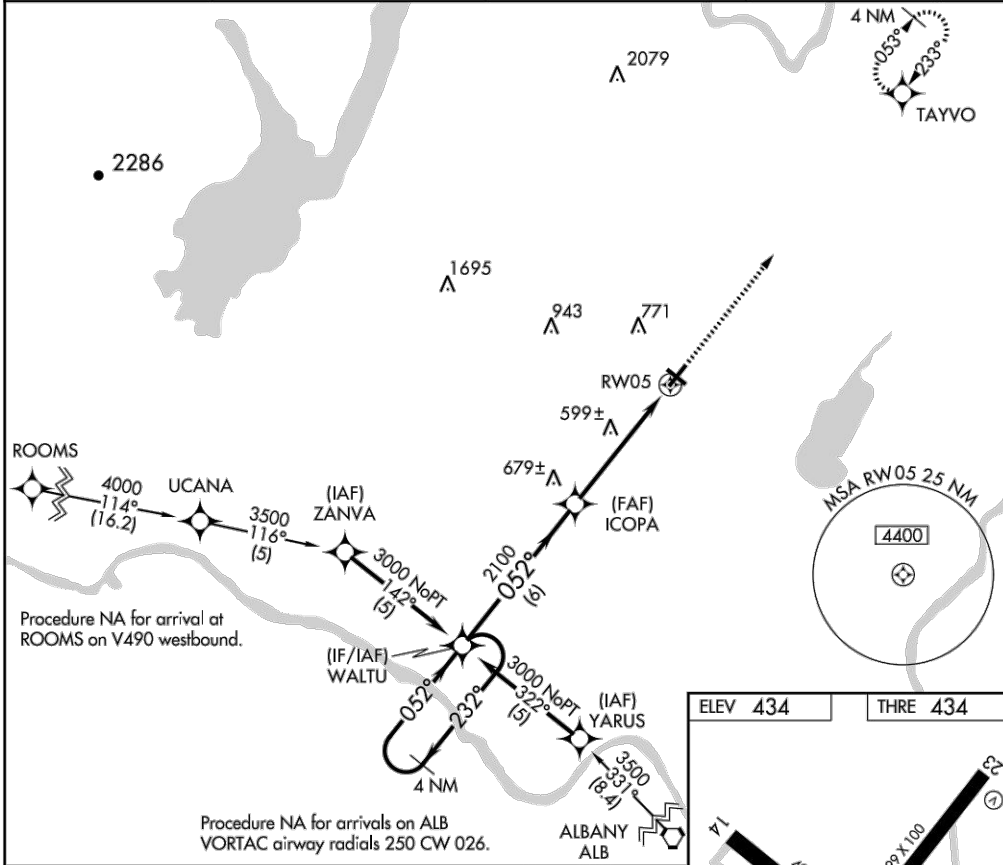
NA DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA. When local altimeter setting not received, use Albany altimeter setting and increase all MDA 80 feet, LNAV Cat C/D, Circling Cat C visibility ¼ mile, and Circling Cat D visibility ½ mile. VDP NA when using Albany altimeter setting.

MISSED APPROACH: Climb to 3000 direct TAYVO and hold.

AWOS-3 132.025	ALBANY APP CON 118.05 263.075	CLNC DEL (GCO) 118.125	UNICOM 122.8 (CTAF) 0
--------------------------	---	----------------------------------	---------------------------------

NE-2, 07 MAR 2013 to 04 APR 2013

NE-2, 07 MAR 2013 to 04 APR 2013



	ELEV 434		THRE 434	
CATEGORY	A	B	C	D
LNAV MDA	860-1	426 (500-1)	860-1¼	426 (500-1¼)
CIRCLING	1000-1 566 (600-1)	1020-1 586 (600-1)	1080-1¾ 646 (700-1¾)	1100-2 666 (700-2)

SARATOGA SPRINGS, NEW YORK
Amdt 1B 05APR12

SARATOGA SPRINGS / SARATOGA COUNTY (5B2)
43°03'N - 73°52'W

RNAV (GPS) RWY 5

**SARATOGA
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RUNWAY 23 APPROACH

FIGURE 2-7

SARATOGA SPRINGS, NEW YORK

AL-5816 (FAA)

12208

WAAS CH 56611 W23A	APP CRS 233°	Rwy Idg TDZE 431 Apt Elev 434	4699
--	------------------------	---	-------------

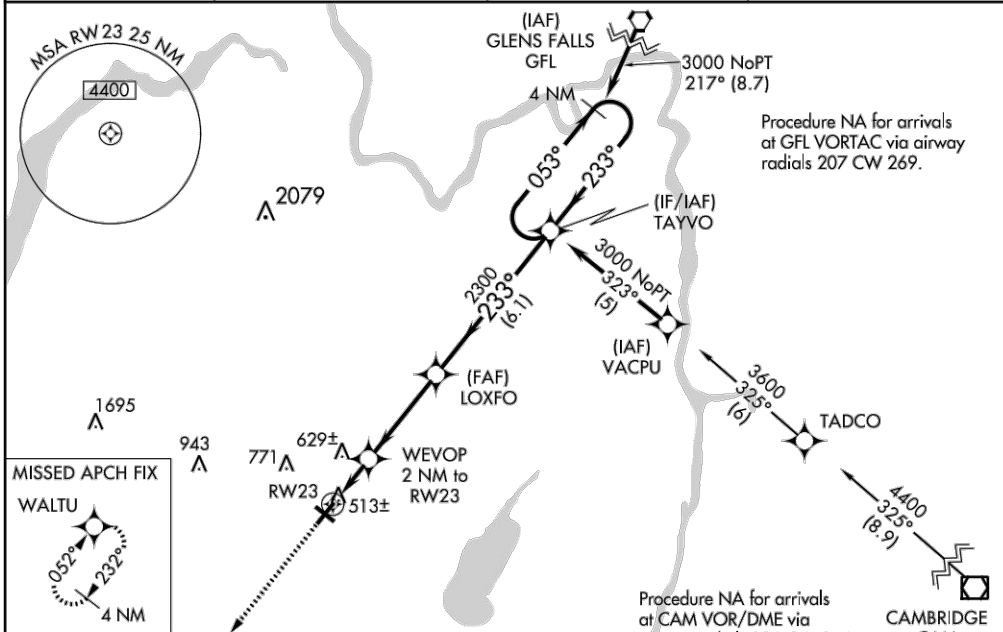
RNAV (GPS) RWY 23

SARATOGA SPRINGS / SARATOGA COUNTY (5B2)

Baro-VNAV NA when using Albany altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 48°C (118°F). DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA. When local altimeter setting not received use Albany altimeter setting and increase all DA 64 feet, and MDA 80 feet. Increase LPV and LNAV/VNAV all Cats visibility ¼ mile. Increase LNAV and Circling Cat. C visibility ¼ mile and Circling Cat. D visibility ½ mile. VDP NA when using Albany altimeter setting.

MISSED APPROACH: Climb to 3000 direct WALTU and hold.

AWOS-3 132.025	ALBANY APP CON 118.05 263.075	CLNC DEL (GCO) 118.125	UNICOM 122.8 (CTAF) 0
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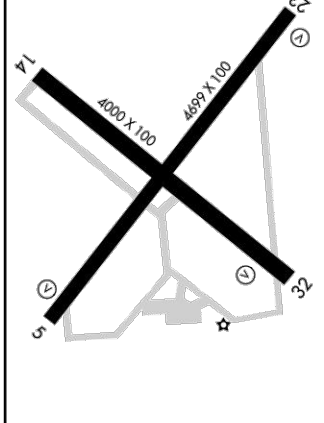


NE-2, 07 MAR 2013 to 04 APR 2013

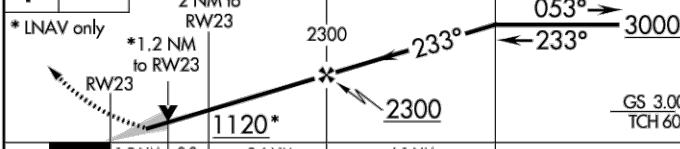
NE-2, 07 MAR 2013 to 04 APR 2013

ELEV 434 TDZE 431

233° to RW23



3000 WALTU VGSi and RNAV glidepath not coincident (VGSi Angle 3.00/TCH 45).
WEVOP 2 NM to RW23 LOXFO TAYVO 4 NM Holding Pattern



CATEGORY	A	B	C	D
LPV DA	745-1 314 (400-1)			
LNAV/VNAV DA	1046-2¼ 615 (700-2¼)			
LNAV MDA	860-1 429 (500-1)	860-1¼ 429 (500-1¼)	860-1½ 429 (500-1½)	
CIRCLING	1000-1 566 (600-1)	1020-1 586 (600-1)	1080-1¾ 646 (700-1¾)	1100-2 666 (700-2)

MIRL Rwy 5-23 and 14-32
REIL Rws 5, 23 and 32

SARATOGA SPRINGS, NEW YORK
Amdt 1A 22OCT09

SARATOGA SPRINGS / SARATOGA COUNTY (5B2)
43°03'N - 73°52'W

RNAV (GPS) RWY 23

SARATOGA COUNTY AIRPORT



CIRCLING APPROACH

FIGURE

2-8

SARATOGA SPRINGS, NEW YORK

AL-5816 (FAA)

12208

VOR/DME CAM	APP CRS	Rwy ldg TDZE	N/A
115.0	113°	N/A	N/A
Chan 97		Apt Elev	434

VOR/DME-A
SARATOGA SPRINGS / SARATOGA COUNTY (5B2)

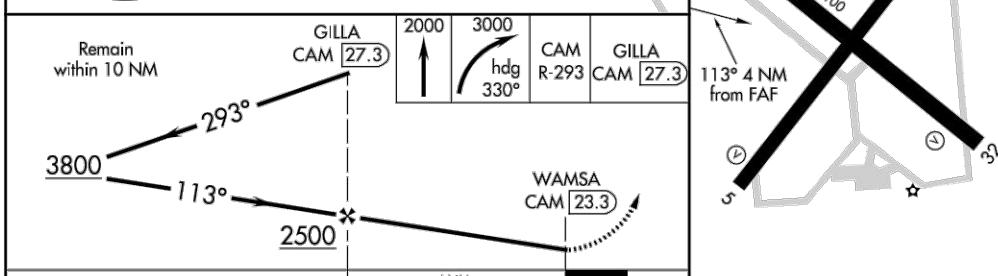
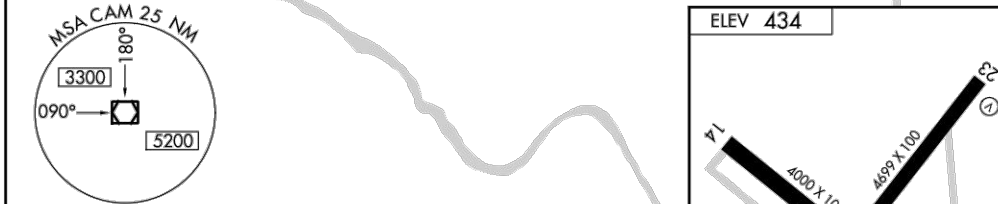
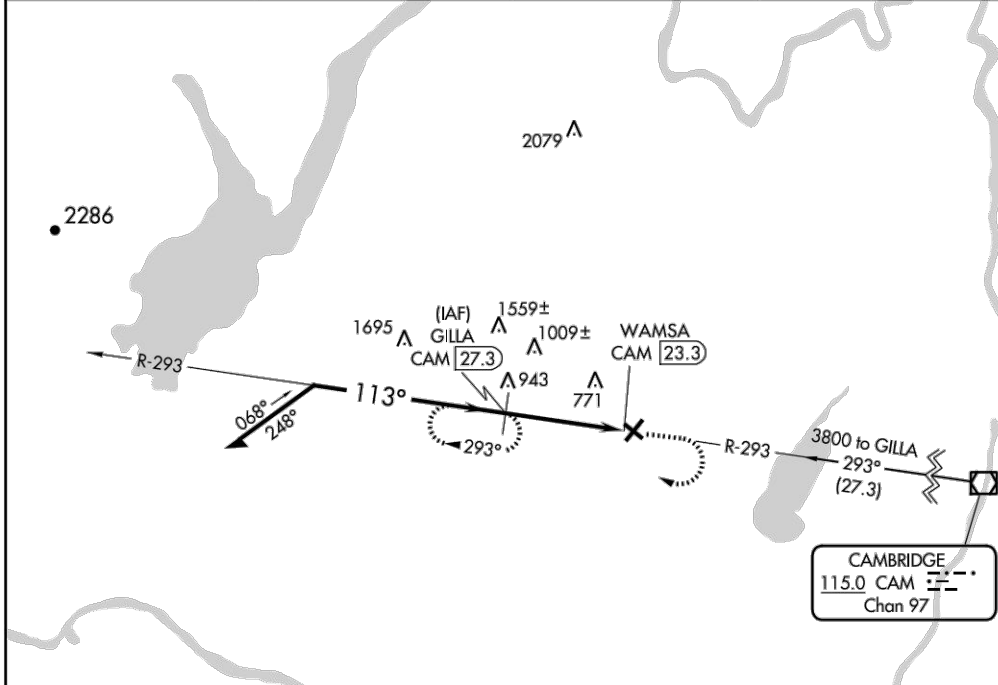
When local altimeter setting not received use Albany altimeter setting and increase all MDA 80 feet, and Cat A, C and D visibility ¼ mile.

MISSED APPROACH: Climb to 2000 then climbing right turn to 3000 via heading 330° and CAM VOR/DME R-293 to GILLA/CAM 27.3 DME and hold.

AWOS-3 132.025	ALBANY APP CON 118.05 263.075	CLNC DEL (GCO) 118.125	UNICOM 122.8 (CTAF) 0
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NE-2, 07 MAR 2013 to 04 APR 2013

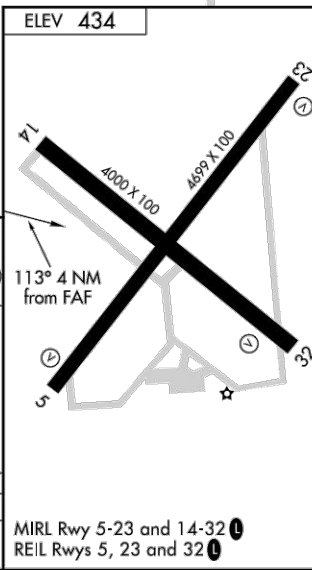
NE-2, 07 MAR 2013 to 04 APR 2013



CATEGORY	A	B	C	D
CIRCLING	1260-1 826 (900-1)	1260-1¼ 826 (900-1¼)	1260-2½ 826 (900-2½)	1260-2¾ 826 (900-2¾)

SARATOGA SPRINGS, NEW YORK
Amdt 1A 19NOV09

SARATOGA SPRINGS / SARATOGA COUNTY (5B2)
43°03'N - 73°52'W
VOR/DME-A



MIRL Rwy 5-23 and 14-32 0
REIL Rwys 5, 23 and 32 0

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- **Runway End Identifier Lights (REIL):** A pair of flashing strobe lights is located at each end of Runway 5-23 and Runway 32 to assist pilots in locating the runway ends during periods of reduced visibility or at night.
- **Wind Sock:** A lighted wind sock is located near the intersection of Runway 5-23 and 14-32 next to Taxiway B. The wind sock helps pilots determine the direction and relative velocity of prevailing winds, as aircraft typically operate into the wind with as little crosswind as possible.
- **Wind Tee:** A lighted wind tee is located adjacent to the wind cone. A wind tee is a lighted, aircraft shaped visual aid that identifies wind direction by rotating into the wind, and is an additional visual aid to pilots.
- **Airport Beacon:** A rotating beacon with alternating clear-green lenses is located to the south of the T-hangar buildings in an open field. Airport beacons assist pilots in the identification of airport locations at night, where the alternating white and green light denotes a lighted civilian use airport. It has been noted that trees located southeast of the beacon obstruct the beacon when flying from the southeast to the northwest.
- **Automated Weather Observation System (AWOS-III):** The AWOS provides on-demand weather observation information to pilots operating at the airport. The AWOS broadcasts on 132.025 megahertz. The information provided by the AWOS includes temperature, dew point, visibility and several other pieces of weather information. Information broadcast by the AWOS assists pilots when using the instrument approaches or considering the initiation of an instrument approach to the Airport.



2.4. LANDSIDE FACILITIES

Landside facilities support the many activities and services involved in storing and maintaining aircraft, and in meeting the needs of the aircraft and passengers before and after use of airfield facilities. Typical landside facilities include aircraft hangars and aprons, terminal buildings, aviation fuel facilities, parking lots, and access roads. Well-maintained and affordable landside facilities are important to an airport's efficient operation and financial success. Landside facilities and services discussed below for the Saratoga County Airport include the following:

- Conventional Hangars
- T-Hangar
- Aircraft Parking Aprons
- Fueling Facility
- Ground Access and Parking
- Airport Utilities

The landside facilities at the Saratoga County Airport are located south and east of the runway intersection. These facilities are shown in Figure 2-9 and discussed in detail below.

2.4.1. Conventional Hangars

There are three conventional hangars on the Airport. The NAFS hangar is 10,000 sf and is used primarily to store NAFS aircraft and at times, larger transient aircraft that overnight at the Airport. There is approximately 1,000 sf of space used for waiting area for passengers, pilot planning area, administrative offices, a conference room and storage space. The NAFS building is located on the southwesterly side of the Airport adjacent to Runway End 5. This building is in very good condition.



The second conventional hangar is the old Richmor Hangar, which is leased by NAFS and serves exclusively as an aircraft maintenance hangar. This hangar, which is about 35 years old, is approximately 7,680 sf in size. There is an administrative/office area about 1,520 sf and is now used as storage space for tools, parts and equipment. The Automated Weather Observation System (AWOS-III) computer equipment is also located in this area. The building, in general, is in fair to poor condition with a number of leaks in the roof.

The third conventional hangar is located across from the Richmor Hangar. This hangar is new and was built in 2010 to replace an old barn hangar. The hangar is about 9,000 sf and is leased to NAFS who uses the hangar for aircraft storage, both short term and long term.



2.4.2. T-Hangars

There are two T-hangar facilities at the Airport that are leased to NAFS. A T-hangar is a multi-aircraft storage hangar in which individual aircraft hangars are nested together. T-Hangars accommodate small single engine and twin engine aircraft. These T-hangars are located southeast of the new conventional hangar.

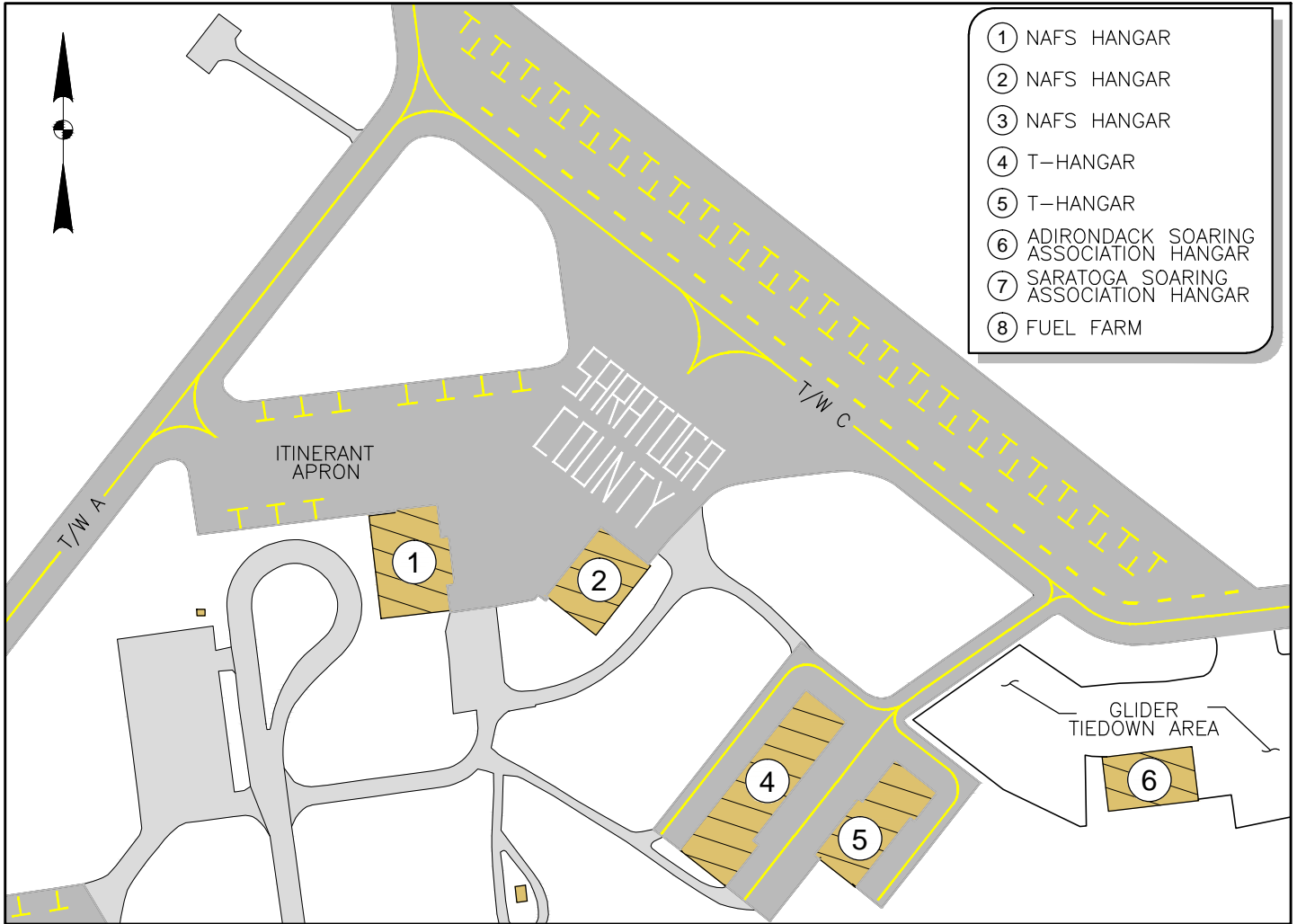


The larger T-hangar unit is approximately 13,800 sf and has seven units. There are five nested hangars housing one aircraft each and two large end units capable of accommodating several single engine aircraft. This hangar is approximately 22 years old and in good condition.

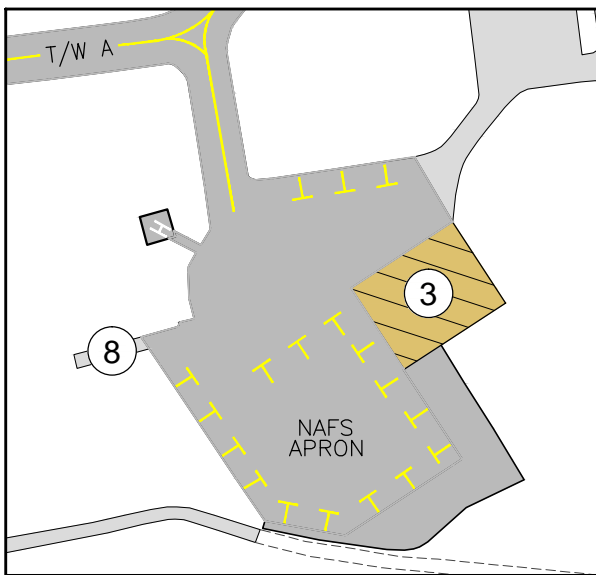
The second T-hangar is approximately 9,000 sf and has 6 nested hangar units. All units in this T-hangar are single aircraft units. This hangar is also 22 years old and in good condition.

LANDSIDE FACILITIES

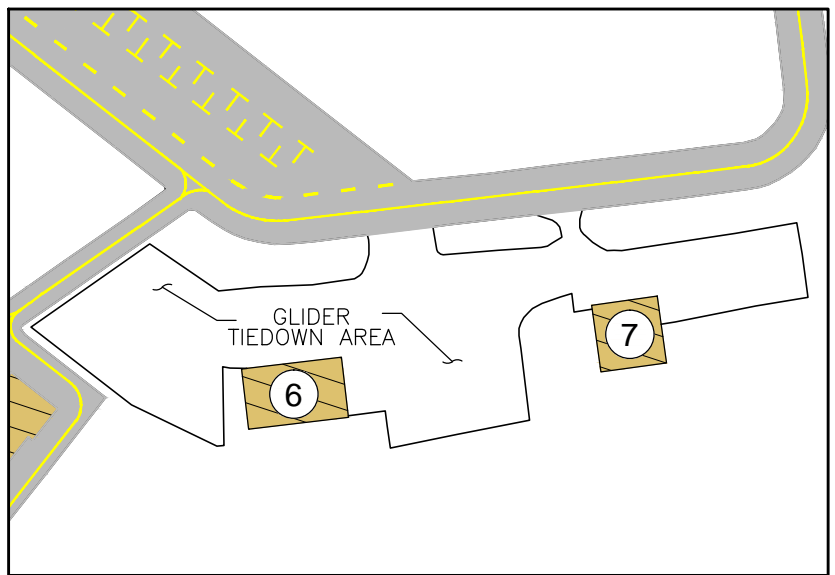
FIGURE 2-9



CENTRAL TERMINAL AREA

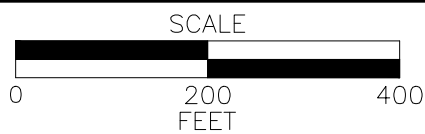


SOUTHWEST TERMINAL AREA



SOUTHEAST TERMINAL AREA

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2.4.3. Glider Hangars

Two glider hangars are located to the north of the T-hangars. The hangars were built by Saratoga Soaring Association in 2003 and Adirondack Soaring Association in 2012. The soaring associations lease the land from the County. These hangars have direct access to Taxiway C, allowing gliders to be towed to and from the hangar areas to the operating runway.

2.4.4. Fueling Facility

There are two above ground fuel tanks located adjacent to the NAFS aircraft parking apron. There are two 10,000 gallon tanks, one for 100LL fuel and one for Jet-A fuel. The tanks have secondary containment for spill protection and dispensers to load fuel trucks.



NAFS has two fuel trucks as well. One truck is used for 100LL and is 1,000 gallons and the second truck has a 3,000 gallon capacity and is used for Jet-A.

2.4.5. Ground Access and Parking



The Airport is accessed via Geyser Road (County Route 43). Access into the Airport is provided by Greenfield Avenue. There is a large parking area between the NAFS building and the former Richmor Hangar that has 60 automobile spaces. There are an additional 10 parking spaces adjacent to the former Richmor Hangar that provides parking for maintenance staff. Greenfield Avenue ends in a “jughandle”, returning cars back to Geyser Avenue.

2.4.6. Airport Utilities

Several utilities serve the Airport. Each of the utilities and the facilities they serve are summarized below:

- **Electricity** – Niagara Mohawk provides electricity. All of the buildings have electrical service including the two glider hangars. Additionally, Niagara Mohawk also serves all airfield lighting including the Airport beacon. The Airport electrical vault houses the lighting equipment interface for the Airport lighting system and is located adjacent to the Airport beacon.
- **Natural Gas** – Niagara Mohawk also provides the natural gas to the Airport. Buildings served by gas include the NAFS hangar, the former Richmor Hangar and the T-hangars.

- **Water** – Water is provided by Heritage Springs Water Company. Buildings served include NAFS, the former Richmor Hangar and the fire hydrants on the Airport. A water line connects to the new box hangar; however, it cannot be used until the facility is connected to a septic system. In addition, two bays of the larger of the two T-hangars are served by water; no units have water.
- **Sewer** – There is no sanitary sewer system at this time. The NAFS facility and Richmor Hangar have septic systems. The new box hangar has no septic system. The larger T-hangar has an oil water/separator & leach field that were plugged and abandoned several years ago.

2.4.7. Airport Equipment

The SCDPW provides the equipment as needed during the seasons. The Airport does have two dedicated snow blower units, a 1972 Sicard and a 2005 Larue that are housed at the SCDPW's County Farm Road Facility and brought to the Airport as needed.

2.4.8. Fire Fighting Services

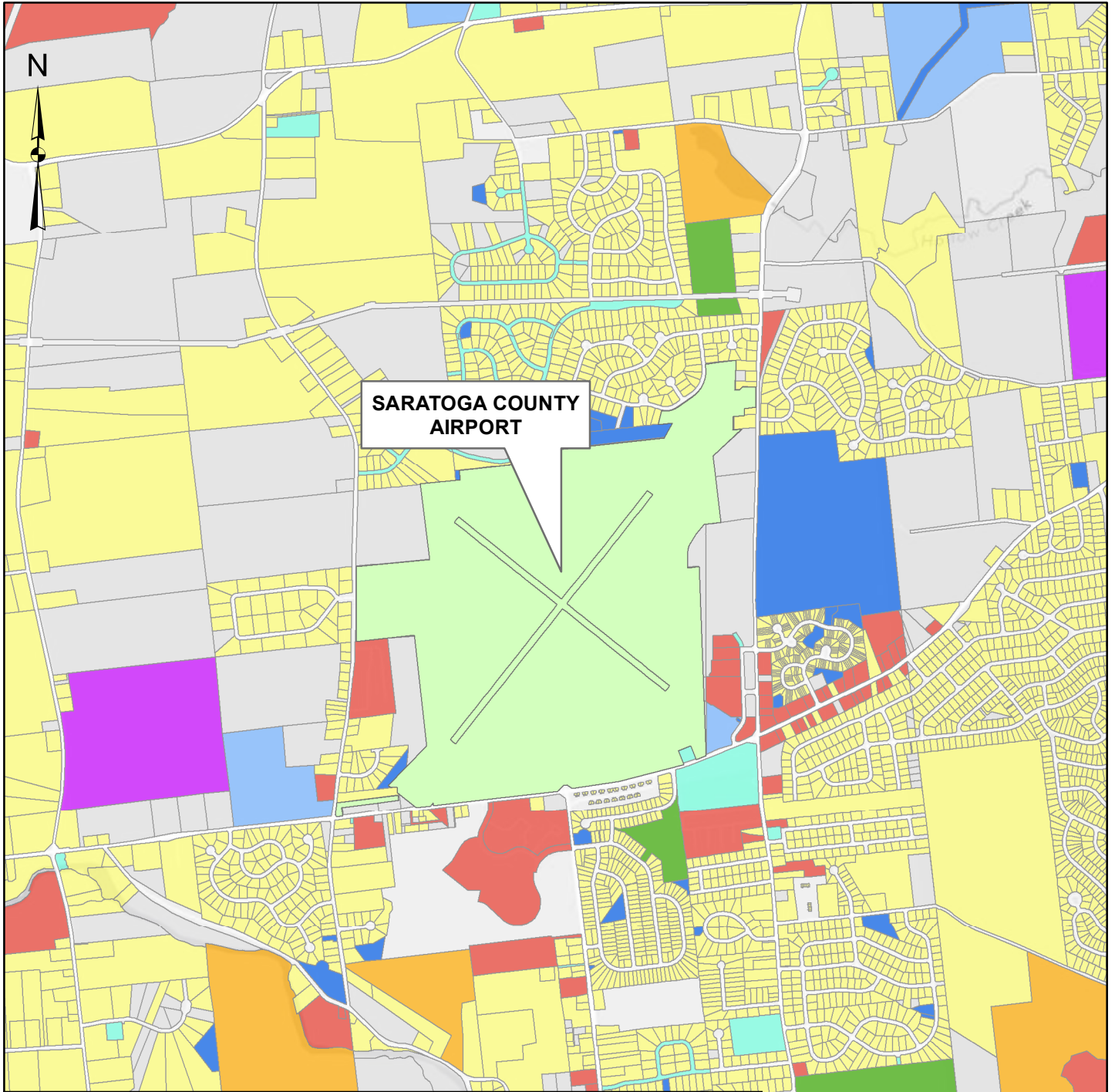
The Town of Milton Fire Department has a facility on Geyser Road east of the Airport entrance. The facility was recently expanded and provides fire service to the Airport through a mutual agreement with the County.

2.5. LAND USE & SOCIOECONOMIC DATA

This section describes land use and the socioeconomic characteristics of the Town of Milton and the County. The data presents the land use around the Airport and presents information on various local and regional economic factors and population statistics.

2.5.1. Existing Land Use

Based on 2013 data obtained from Saratoga County and the Town of Milton, the adjacent land uses that surround the Airport are shown in Figure 2-10. The Airport is located within the Town of Milton. There are various residential land uses near the Airport, particularly north of the Airport where several neighborhoods with single family residential land uses exist along Acland Boulevard, Van Tassel Lane, Ichabod Lane, and Legend Lane. In addition, northeast of the Airport, across Rowland Street from the Airport, are also several residential neighborhoods along Van Brummel Lane and Katskill Way. The area directly east of the Airport, along Rowland Street, mainly consists of vacant commercial lands. Southwest of the Airport, also along Rowland Street, are several commercial structures, including several banks and a supermarket. A miniature golf course and a newly constructed (2014) medical building are located immediately southwest of the airport, directly off the Runway 32 end. Further east of the Airport, particularly along Deer Run Drive, an additional number of residential land uses occur.



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Land Use

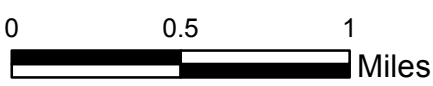
- | | | |
|--------------|--------------------------|-----------------------|
| Agricultural | Commercial | Industrial |
| Residential | Recreation/Entertainment | Public Services |
| Vacant | Community Services | Wild, Forested, Parks |
| | AIRPORT | |

Source: Saratoga County Planning

Copyright: ©2012 Esri, DeLorme, NAVTEQ

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South of the Airport, along Geyser Road, the Milton Fire District operates a station off the Runway 32 end, and the Town of Milton operates a park and the Town municipal building. Also along Geyser Road are several residential land uses, including several condominium and apartment complexes near the entrance to the Airport. Further west along Geyser Road are several additional residential parcels intermixed with a few commercial entities. Further south and southwest from Geyser Road, land use is mainly residential. West of the Airport, land uses along Stone Church Road are nearly entirely residential in nature, including a mobile home community.

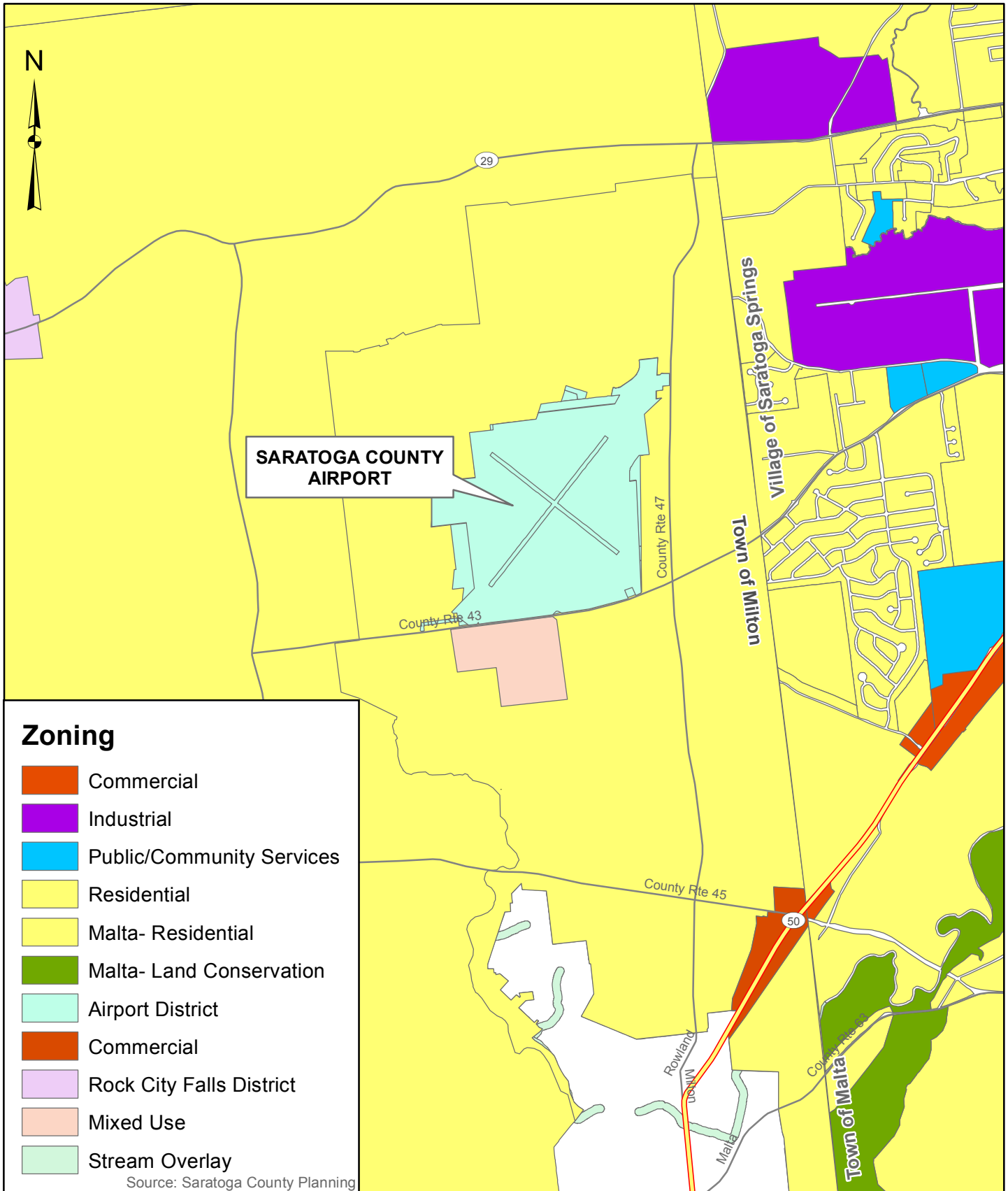
Downtown Saratoga Springs, the closest city to the Airport, is approximately four miles to the northeast. Vehicle travel from the Airport to Saratoga Springs could occur over two routes, including Geyser Road, with mixed-use development, to the commercial State Route 50, or the mainly undeveloped Rowland Street to State Route 29, where development is minimal until reaching Saratoga Springs. Both Geyser Road and Rowland Street are designated as County Roads and utilized as primary roads within the area.

2.5.2. Zoning

Zoning in the vicinity of the Saratoga County Airport is enacted and enforced by the Town of Milton. According to the Town Code, and the Zoning Map provided by Saratoga County, dated January 6, 2010, the entire existing Airport property is zoned as “A – Airport District”, as displayed in Figure 2-11. Land uses permitted within the Airport District are limited, with “accessory building” and “forest and forest farming operations” as the only land uses permitted by right. Land uses permitted with a special use permit include airports and private airstrips, light manufacturing, telecommunication towers, restaurants, public buildings, and private schools. No residential land uses, or land uses that are not typically considered compatible with airport operations, are permitted within the Airport District.

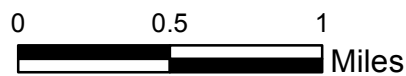
Much of the area in the vicinity of the Airport are zoned “R1 – Residential District”. Additionally, several properties southwest of the Airport, along Geyser Road and in the vicinity of the Runway 5 end, are zoned “MU – Mixed Use District”. To the east and southeast of the Airport, along Geyser Road and Rowland Street in the vicinity of the Runway 32 end, land is zoned as “H2 – West Milton Hamlet District”. Within these districts, many additional land uses are permitted, including 1-family residential (permitted by right in all districts), multi-family dwellings (permitted by right in the MU district), public recreation areas (permitted by right in all districts), hospitals (permitted with a special use permit in the MU district), and day-care centers (permitted with a special use permit in the MU and H2 districts). These land uses are examples of those that are considered less compatible with the operations of an airport.

Beyond the traditional zoning districts, the Town of Milton has also established a Runway Protection Zone Overlay District (RPZ). According to the Section 180-28.1 of the Town Code, “The purpose of this district is to acknowledge the unique aspects of the Saratoga



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**SARATOGA
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County Airport and to encourage compatible land uses adjacent to the Airport for the purposes of promoting the public health, safety, and general welfare of the residents and aviation users.¹ The RPZ district indicates that all new construction within the district shall be subject to site plan review, and that no new use, building, or structure will be permitted within the district, other than accessory structures, with the exception of golf courses which may be permitted after the completion of a wildlife hazard assessment. Additionally, the RPZ district restricts residential structures, structures that promote large concentrations or bulk storage of flammable substances or materials, or the public assembly of people, including schools, hospitals, shopping centers, and restaurants. In addition, if subdivision of land within the RPZ district was to occur, a fair disclosure agreement and covenant must be recorded with the subdivision, and the potential buyers notified, that the property is in an area where aviation activity occurs and impacts associated with, but not limited to, noise, vibration, and hours of operation, may occur.

2.5.3. Socioeconomic Base

According to the 2010 Census, the population of Saratoga County was 219,607. The U.S. Census Bureau estimates that the population Saratoga County increased to 222,133 by 2012, a growth of approximately 1.15 percent over the two year span, or an annual growth of approximately 0.58 percent. This indicates a decrease in the rate of growth in Saratoga County, where annual growth between 2000 and 2010 was approximately 0.95 percent. On a more local level, in 2010, the population of the Town of Milton was 18,575, a growth of 8.61 percent from the 2000 population. This represents an average annual growth of approximately 0.86 percent.

According to the 2007-2011 American Community Survey 5-Year Estimates, the median household income in Saratoga County was estimated at \$67,186, an increase of 35.84 percent from the median household income identified in the 2000 Census. Median household income in the Town of Milton, based on the 2007-2011 American Community Survey 5-Year Estimates, is estimated at \$66,806, an increase of 48.44 percent from the 2000 Census. The median household incomes identified in the 2007-2011 American Community Survey 5-Year Estimates are all significantly greater than the national average of \$52,762.

Saratoga County, as part of the Capital District Region, has more recently been considered part of New York's "Tech Valley". According to Empire State Development, the Region has strategically invested in various emerging technologies, including bio life sciences, nanotechnology, chemical manufacturing, and clean energy production. Combined with the many colleges and universities in the region, including SUNY Albany's burgeoning College of Nanoscale Science and Engineering, the area is well suited for growth in these various industries. Several of the major employers in Saratoga County are included in Table 2-9.

¹ Town of Milton Code Chapter 180, Section 28.1.



Employers are listed in order of the number of employees reported. The largest employer in Saratoga County is GLOBALFOUNDRIES in Malta.

Table 2-9 – Top Employers

Employer Name	Municipality	Number of Employees
GLOBALFOUNDRIES	Malta	1,800
Stewart’s Ice Cream	Saratoga Springs	1,550
Shenendehowa Central School District	Clifton Park	1,350
State Farm Insurance	Malta	1,171
Saratoga County Government	Ballston Spa	1,075
Momentive Performance Materials	Waterford	1,000
Target	Wilton	1,000
Saratoga Springs City School District	Saratoga Springs	988
United States Navy	Milton	900
Quad Graphics	Saratoga Springs	825
Saratoga Hospital	Saratoga Springs	823
Skidmore College	Saratoga Springs	713
Price Chopper	Various Locations	648
Saratoga Bridges	Ballston Spa	580
Sysco Foodservice	Halfmoon	500

Source: The Chamber of Southern Saratoga County
http://www.southernsaratoga.org/economic_development/Largest_Employers.aspx

2.6. AIRSPACE

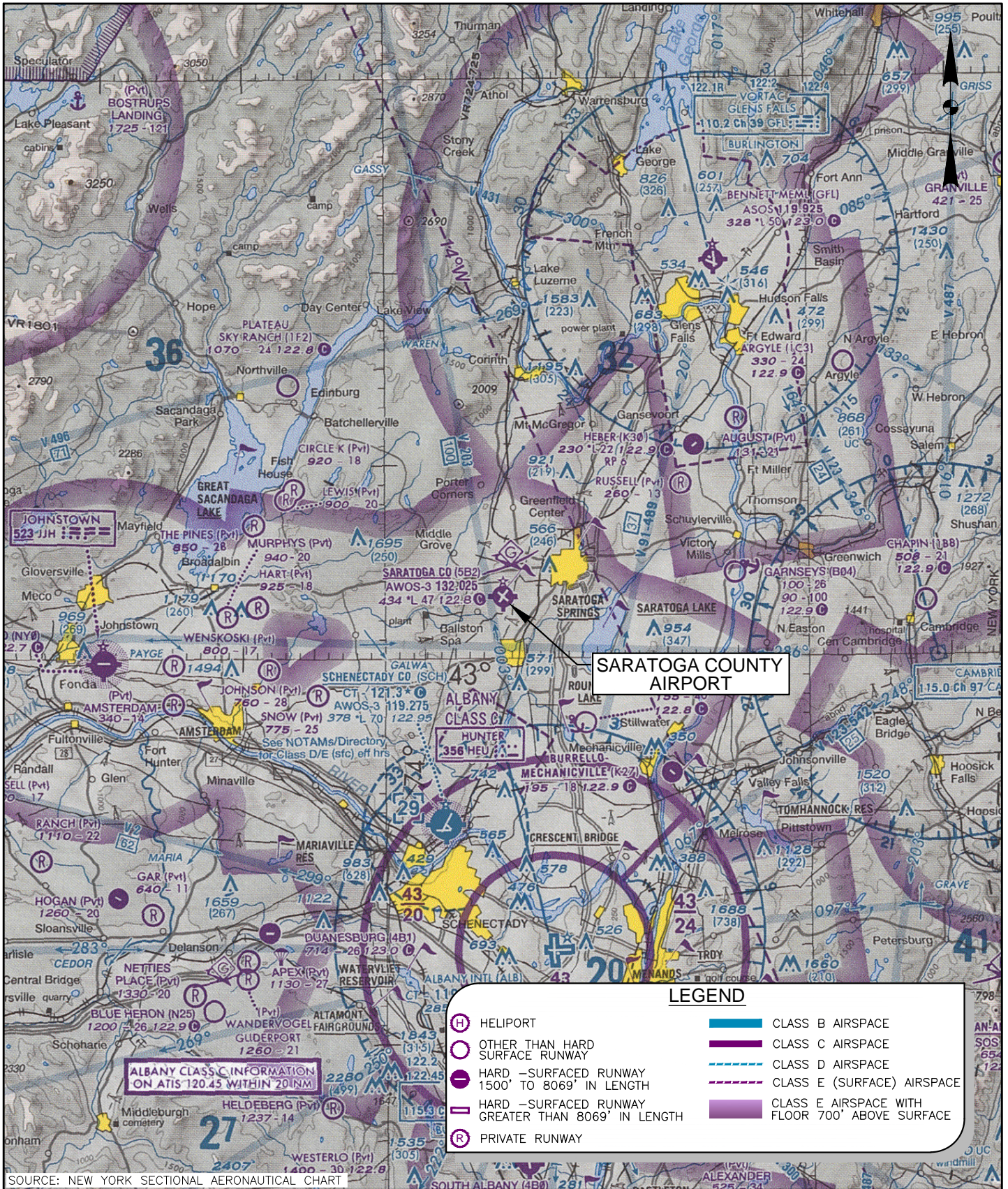
The following section describes how aircraft are controlled and the airspace structure on and surrounding the Airport.

2.6.1. Airspace Structure

Airspace in the United States is classified into the following categories: controlled, uncontrolled, special use and other. A brief description of these categories and how they apply to airspace in the vicinity of Saratoga County Airport is provided in the following paragraphs. A description of airspace is provided in Table 2-10 and Figure 2-12 provides a graphic of the Local and Regional airspace structure.

AIRSPACE STRUCTURE

FIGURE 2-12



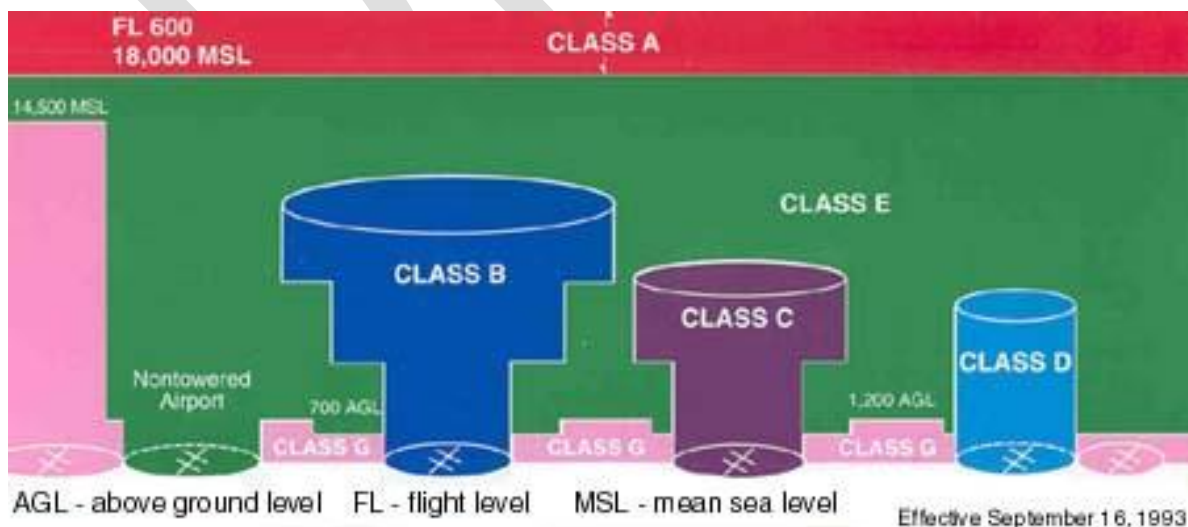
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Table 2-10 – Airspace Structure

Controlled Airspace	
Class A:	Airspace above 18,000 feet Mean Sea Level (MSL). Class A airspace contains all the high altitude airways and jet routes. IFR flights are provided sequencing and separation from other IFR flights.
Class B:	Airspace within a 20 Nautical Mile (NM) radius around the nation's busiest commercial airports. Class B airspace may extend up to 10,000 feet MSL. Aircraft entering Class B airspace must contact air traffic control (ATC) for clearance and maintain radio contact with ATC while within the airspace. Aircraft separation services are provided to all aircraft within the airspace by ATC.
Class C:	Terminal airspace within a 10 NM radius around busy commercial airports. Class C airspace extends from the surface up to 4,000 feet above airport elevation. A Mode C Transponder is required as well as two-way radio contact with ATC. ATC provides sequencing and separation services for IFR and VFR flights.
Class D:	Terminal airspace within a 5-statute-mile radius surrounding moderate activity commercial and military airports. Class D airspace extends up to 2,500 feet above airport elevation. ATC provides separation services for IFR flights.
Class E:	General and enroute airspace which starts at the surface or a designated altitude at non-towered airports, or lies between Class B, C, D or G airspace and the 18,000 foot MSL floor for Class A airspace. ATC provides separation services for IFR flights.
Uncontrolled Airspace	
Class G:	Occupies all airspace that is not controlled. Extends from the ground up to 700 feet or 1,200 feet above ground near airports, and up to 14,500 feet AGL in remote areas removed from airports. Class G airspace includes all low level airspace surrounding the Saratoga County Airport below 1,200 feet AGL above ground level. ATC may provide basic information services to aircraft that are in radio contact with ATC.

Source: *McFarland Johnson, Inc ; Aeronautical Information Manual at http://www.faa.gov/air_traffic/publications/ATPubs/AIM/aim.pdf*



Controlled Airspace - Controlled airspace is classified as Class A, B, C, D, and E. Each of these classes has different dimensions, purposes and requirements. Class A airspace covers the entire United States and encompasses all airspace from 18,000 feet to 60,000 feet above NFIA. Aircraft flying in Class A airspace must operate under instrument flight rules.

ATC clearance is required prior to operating an aircraft within either Class B or Class C airspace. All aircraft that have received such clearance are provided with separation services by ATC. Class B and Class C airspace define areas inside which all aircraft are subject to certain operating, pilot, and equipment rules. Class B airspace is usually reserved for areas surrounding the nation's busiest airports.

The nearest Class C Airspace is located at Albany International Airport. Class C airspace resembles a cylinder with a radius of five nautical miles, extending from the ground to an altitude of 2,200 feet above ground level (AGL). This cylinder is topped by another, larger, cylinder with a radius of ten nautical miles which extends to an altitude of 4,700 feet AGL.

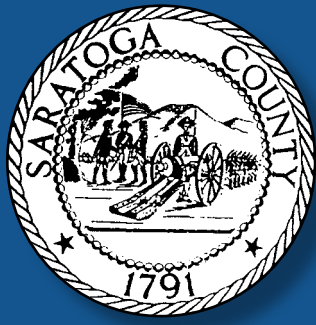
The nearest Class D is associated with Schenectady County Airport. Class D airspace extends five nautical miles in all directions from the center of Schenectady County Airport and extends upward to an altitude of 3,100 feet. Aircraft operating in Class D airspace must maintain radio contact with the appropriate control facility while operating in the airspace. Pilots must also abide by certain operating, pilot, and equipment rules while operating within Class D airspace.

Class E airspace includes all the airspace that is not classified as A, B, C, or D. Class E airspace has no special restrictions with respect to pilot or aircraft equipment rules. However, it is controlled airspace, meaning that aircraft can be provided with ATC services. Saratoga County Airport lies within Class E airspace. The controlling facility is Albany Approach/Departure.

Uncontrolled Airspace - Class G airspace is uncontrolled airspace. It consists of all airspace that is not classified as A, B, C, D, or E.

Special Use Airspace - Special use airspace consists of Prohibited and Restricted Areas, Warning Areas, Military Operation Areas, Alert Areas, and Controlled Firing Areas. There are no prohibited areas in the vicinity of Saratoga County Airport.

There are no Warning Areas, Alert Areas, or Controlled Firing Areas; however, there is a complex of Military Operation Areas (MOA) that are located northwest of Saratoga County Airport. They include the Tupper, Adirondack, Carthage, Cranberry and Lowville MOAs. Tupper MOA is closest and is approximately 40 nautical miles to the northwest.



McFarland Johnson