Middleton Municipal Airport—Morey Field (C29) Pilot Handbook

Version 1.0 (December 2019)

Background

The Middleton Municipal Airport is committed to working closely with community members and the flying public to help minimize aviation noise impacts in the Middleton, Wisconsin, area. Morey Field has been a member of the community and a vital economic contributor to the area since 1942. As the community has grown around the airport, airport staff has worked diligently to address the concerns of its neighbors.

Endorsed by the Middleton Airport Commission, this Pilot's Guide was created as an educational resource for pilots, certified flight instructors, and anyone with aircraft based at C29. It is intended to help clarify roles and responsibilities for operating at the airport.

Please contact the airport manager at (608) 836-1711 with any questions or suggestions for improving this guide.

Definitions

AGL: Above ground level

ATC: Air Traffic Control

BOA: Bureau of Aeronautics, a division of the state's Dept. of Transportation

C29: Airport code for Middleton Municipal Airport—Morey Field

FAA: Federal Aviation Administration

FAR: Federal aviation regulations

FSS: Flight Service Station

GCO: Ground Communications Outlet

IFR: Instrument Flight Rules

VHF: Very High Frequency (refers to radio signal)

Minimum Safe Altitudes

Minimum safe altitudes exist for pilot safety and the safety of others. They also exist to dissipate aircraft noise when flying above noise sensitive areas. As part of the Middleton Municipal Airport's Noise program, all urban and residential subdivisions around the airport are considered congested areas and section (b) of FAR 91.119 applies.

Note: For takeoff or landing, Minimum Safe Altitudes does not apply. Additionally, Minimum Safe Altitudes does not apply to IFR Flight (Instrument Flight Rules Flight) or BOA/FAA Assigned Pattern Altitude.

Unless otherwise stated, the following Minimum Safe Altitudes apply.

The complete FAR 91.119 is as follows:
91.119 Minimum safe altitudes; general

> *Except when necessary for takeoff or landing, no person may operate an aircraft below the following altitudes:*
>
> a) *Anywhere – An altitude allowing, if a power unit fails, an emergency landing without undue hazard to persons or property on the surface.*
> b) *Over congested areas – Over any congested area of a city, town, or settlement, or over any open-air assembly of persons, an altitude of 1,000 feet above the highest obstacle within a horizontal radius of 2,000 feet of the aircraft.*
> c) *Over other than congested areas – An altitude of 500 feet above the surface except over open water or sparsely populated areas. In that case, the aircraft may not be operated closer than 500 feet to any person, vessel, vehicle, or structure.*
> d) *Helicopters – Helicopters may be operated at less than the minimums prescribed in paragraph (b) or (c) of this section if the operation is conducted without hazard to persons or property on the surface. In addition, each person operating a helicopter shall comply with routes or altitudes specifically prescribed for helicopters by the Administrator.*

Helicopter operations may be conducted below the minimum altitudes set for fixed-wing aircraft because they have unique operating characteristics, the most important of which is their ability to execute pinpoint emergency landings during power-out emergencies. Furthermore, the helicopter's increased use by law enforcement and emergency medical service agencies requires additional flexibility.

Pattern Altitude

Per Section 4-3-3 of Chapter 3 of the Airman's Information Manual and AC 90-96A paragraph 8c -

It is recommended that aircraft enter the airport traffic pattern at one of the following altitudes listed below. These altitudes should be maintained unless another traffic pattern is published in the Chart Supplements. Weather minimums always apply. Note: no alternate pattern altitude is published in the Chart Supplements for Middleton Municipal Airport, however a pattern altitude of 1,000' AGL (Above Ground Level) is published for C29 by the Wisconsin Bureau of Aeronautics.

Propeller-driven aircraft enter the traffic pattern at 1,000' AGL.

Large and turbine-powered aircraft enter the pattern at an altitude not less than 1,500' AGL or 500' above the established pattern.

Helicopters in the traffic pattern may fly a pattern similar to the fixed aircraft pattern but at a lower altitude 500' AGL and closer to the runway. The pattern may be on the opposite side of the runway from fixed-wing traffic when airspeed requires or for practice power off landings. Landings other than the runway must avoid the flow of traffic.

A pilot may vary the size of the traffic pattern depending on aircraft performance characteristics. Pilots of en route aircraft should be alert for aircraft in the traffic pattern and avoid these areas when possible.

Middleton Municipal Airport has an established traffic pattern of 1,928'. (The airport's official elevation is 928' above mean sea level.)

Exemptions to the Minimum Safe Altitudes:

- Operating in the established traffic pattern is exempt from Minimum Safe Altitudes.
- As stated previously, Minimum Safe Altitudes does not apply to IFR Flight or BOA/FAA Assigned Pattern Altitude.
- As stated previously, Minimum Safe Altitudes does not apply for takeoff or landing.

Unless otherwise stated, the Minimum Safe Altitudes apply.

Airspace

The airspace above the runway at Middleton Municipal Airport consists of three categories of airspace G, E and C. See Figure 1 for a cut-out of the Chicago Sectional Chart below.

Each airspace has defined weather minimums as specified in Chapter 3 of the Airman's Information Manual and 91.155 of the Federal Aviation Regulations.

Class G airspace is uncontrolled airspace extending from the ground to 700' above the ground or 1,628' MSL (Mean Sea Level) above the airport runway. Daytime weather minimum for Class G airspace is 1 Statute Mile Visibility and Clear of Clouds.

Class E airspace is controlled airspace extending from the top of the G airspace to 18,000' MSL **or**—as is the case with C29—any overhanging airspace. Above this airport, Class C airspace starts at 2,300' MSL. That means the E airspace exists from 1,629' MSL to 2,299' MSL. Daytime weather minimums for Class E Airspace is 3 statute miles visibility, 500' below clouds, 2,000' lateral clearance from clouds and 1,000' above clouds.

Class C airspace is controlled airspace as depicted on the sectional charts. Over the runway of Middleton Municipal Airport, Class C airspace starts at 2,300' MSL and extends to 4,900' MSL. Entry into Class C airspace requires the establishment of communications with MSN TRACON. Daytime weather minimums for Class C airspace is the same as Class E airspace.

Figure 1. Chicago Sectional Cut-Out

Opening and Closing an IFR Flight Plan

To be consistent with Minimum Safe Altitudes, a ceiling of 1,200' AGL must exist in order to open an IFR flight plan while in the air. If the ceiling is lower than 1,200' AGL, flight plans should be opened on the ground before take-off.

The options for opening an IFR flight plan on the ground are to call the MSN Tower using a cell phone or to use the on-field GCO (Ground Communications Outlet).

Madison Tower option: Phone number: 608 244-5691. Ask for Radar. Expect a void time clearance of no longer than 15 minutes. For best results, be ready for take off as they will ask you "which runway and how long." For Madison traffic flow, take off on Rwy 28 whenever possible.

GCO option: The GCO system uses the frequency of 121.725. The system is activated with four "key clicks" on the VHF radio to contact the appropriate ATC (Air Traffic Control) facility or six "key strokes" to contact the FSS (Flight Service Station). There is a timer on the modem connection. If no voice is heard for a preset interval, the system disconnects. The VHF transceiver is very low power, 2 - 5 watt, which sometimes limits access. The GCO system is intended to be used only on the ground. GCO availability is noted in the text portion of the airport diagram.

Noise Abatement Program

Noise abatement procedures are established to help minimize disruptions to surrounding residential areas. Although these procedures are not required, their use is strongly recommended.

Traffic patterns for runway 28 (depicted in **red**) and runway 10 (depicted in **blue**) have been altered from the standard FAA guidance to avoid overflight of our neighbors to the East and West of the airport.

For safe operations, aircraft must take off and land into the wind. Since wind direction changes by season and even throughout the day, the runway preferred by pilots can also change.

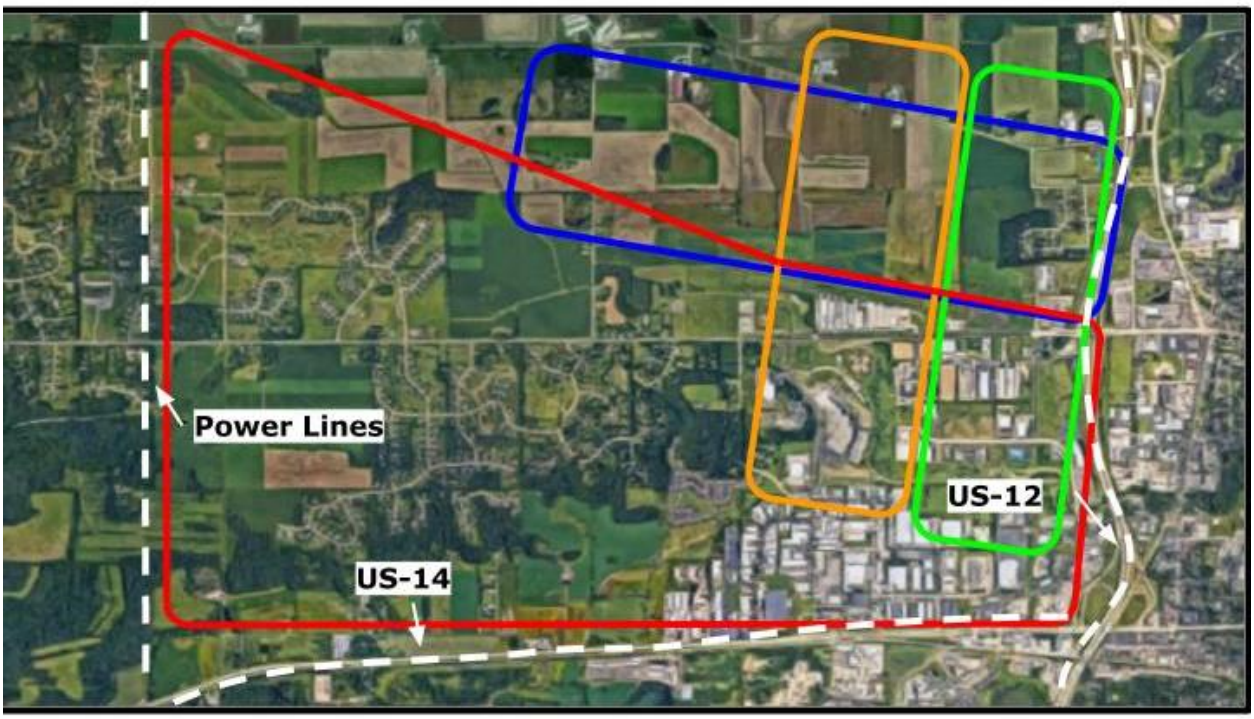
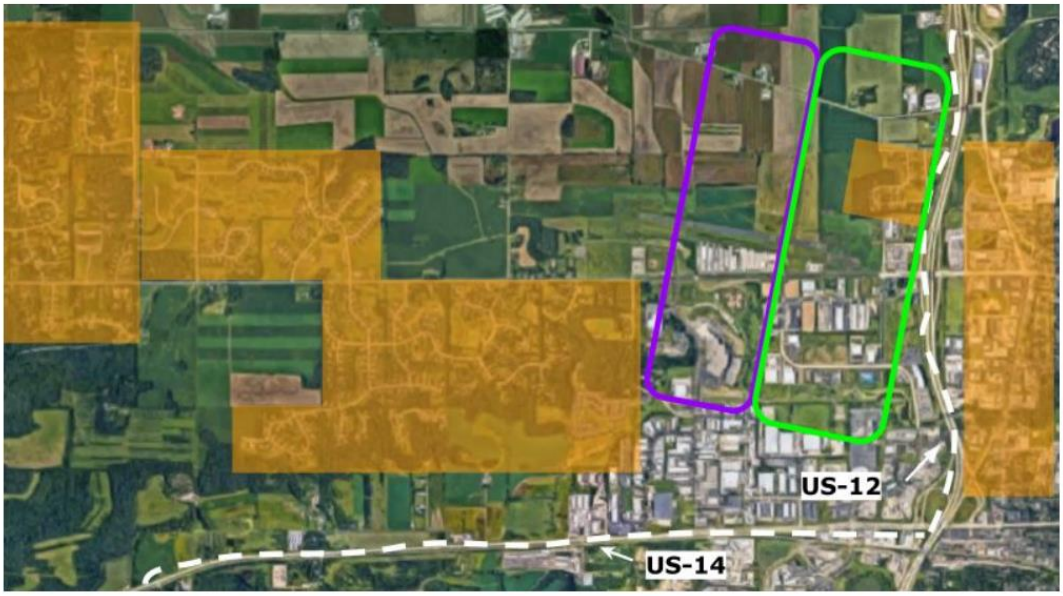


Figure 2. Approximate Flight Patterns at Morey Field.

Morey Airport Noise Abatement Procedures (Runway 01/19)

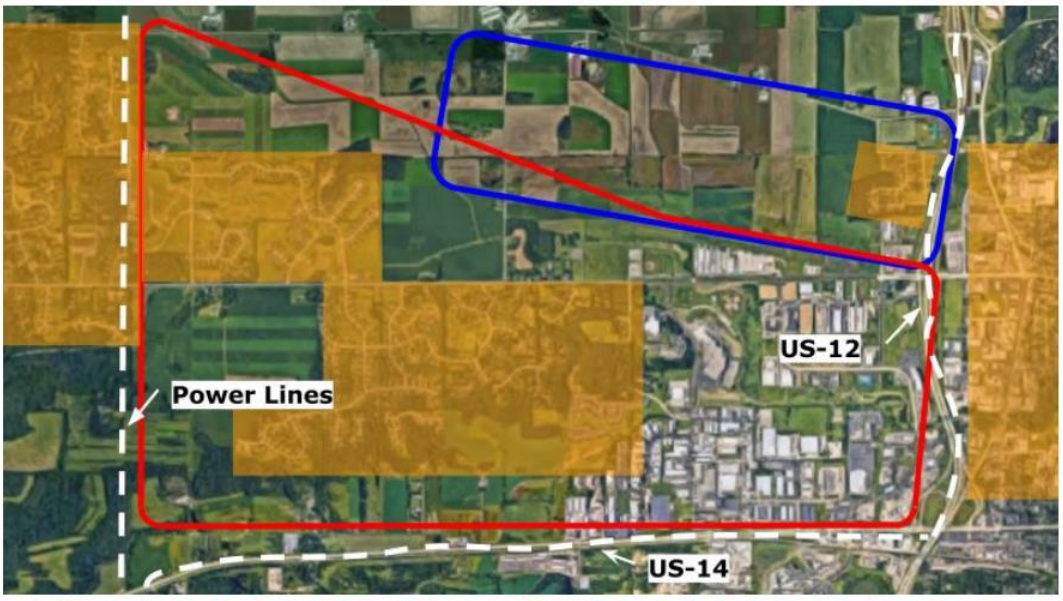


Runway 01 - Turn crosswind before reaching Highway K. Turn base over US-14.

Runway 19 - Turn crosswind over US-14. Turn base before reaching Highway K.

NOISE SENSITIVE AREAS DEPICTED IN ORANGE

Morey Airport Noise Abatement Procedures (Runway 10/28)



Runway 28 - When able, turn to a heading of 300°. Climb to 1,900 feet and throttle back before turning crosswind over the power lines. Turn downwind over US-14.

Runway 10 - Turn crosswind over US-12. Lead the turn to avoid overflying the city East of the highway.

NOISE SENSITIVE AREAS DEPICTED IN ORANGE

Figure 3. Noise Abatement Posters

MIDDLETON MUNI – MOREY FLD (C29) 5 NW UTC–6(–5DT) N43°06.86′ W89°31.89′ **CHICAGO**
928 B NOTAM FILE GRB **L–28G**
RWY 10–28: H4000X100 (ASPH) MIRL **IAP**
RWY 10: REIL. PAPI(P2L)—GA 4.0° TCH 31′. Trees.
RWY 28: REIL. PAPI(P2L)—GA 4.0° TCH 36′. Trees.
RWY 01–19: 2000X120 (TURF)
RWY 01: Road.
RWY 19: Trees.
SERVICE: S4 **FUEL** 100LL, JET A **LGT** Dusk–Dawn. ACTIVATE MIRL Rwy 10–28; REIL Rwy 10 and Rwy 28—CTAF.
AIRPORT REMARKS: Attended 1400–2330Z‡. Birds on and invof arpt; especially during rainy periods. Avoid noise sensitive area 1 mile southwest, ctc arpt manager at 608–836–1711 for noise abatement procedures. Rwy 01–19 marked with yellow cones.

Figure 4. Excerpt of the Chart Supplement Entry for Morey Field

Figure 5. Noise Abatement Procedure Signs Next to Taxiways