DES MOINES INTERNATIONAL AIRPORT (DSM)

PILOT INFORMATION

Updated: 07/03/2023

DSM Tower Administrative Office
Business Phone 515-974-8010
Open 0800L to 1630L – Monday through Friday

Federal Aviation Administration

Introduction

The purpose of this document is to supplement the From the Flight Deck Videos that are produced by the FAA Runway Safety Group. Here you will also find information provided by the local air traffic controllers at the airport where you intend to fly.

Table of Contents

IMPORTANT NOTICE

The information in this facility supplement is subject to change. Not for navigation or legal* pre-flight action. Always refer to official pre-flight materials such as, but not limited to, NOTAMs, airport diagrams, VFR charts and airport construction notices for the latest airport-specific details.

General Links

Here are some links to current FAA information.

- **Aeronautical Information Services**
- **Airport Construction**
- **Airport Diagram**
- **Chart Supplement**
- **From the Flight Deck Videos**
- **Hot Spots**
- **NOTAMS**
- **VFR Charts**

Some Advisory Circulars for Reference

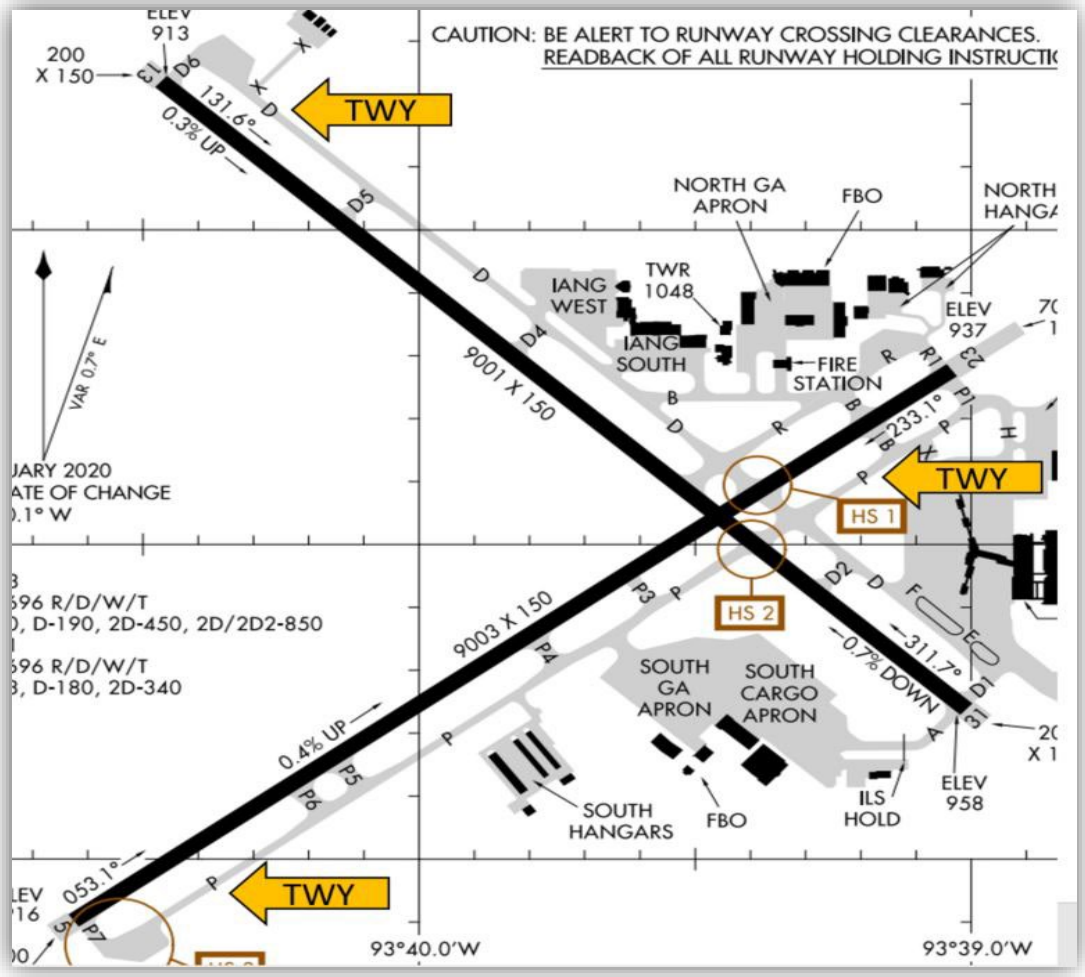
- AC 90-66C (faa.gov) Subject: Non-Towered Airport Flight Operations – 6/6/23
- AC 91-73B (faa.gov) Subject: Parts 91 and 135 Single Pilot, Flight School Procedures During Taxi Operations – 7/30/12
- AC 91-92 (faa.gov) Subject: Pilot's Guide to a Preflight Briefing - 3/15/21
- AC 90-48E (faa.gov) Subject: Subject: Pilots' Role in Collision Avoidance – 10/20/22

DSM Specific Section

Des Moines International Airport (DSM) is a medium sized multi-use airport, located south of the city of Des Moines, Iowa, at the western edge of a large residential area. The airport's geographical location is said to make it a bit challenging for pilots to find at night. Utilizing all available navigation tools such as ILS, GPS, and VOR can make this challenge that much easier.

1. Know Before You Go: DSM

- The runway configuration consists of two intersecting runways, RWY 13/31 and RWY 5/23, along with full length parallel taxiways for each runway.
- Don't confuse a TWY for a RWY. Pilots have departed on the parallel TWY instead of the RWY.
- Pilots making Intersection departures on RWY 05/23, from TWY P3 or P4, have lined up headed in the wrong direction.
- This also occurs when making an intersection departure on RWY 05/23 at TWY D.



- Full-length parallel taxiways may lead to confusion.

  - TWY D extends full length and north of RWY 13/31.
  - TWY P extends full length and south of RWY 05/23.
- The TWY system provides access to all of the services and businesses located on 3 sides of the airport.
- General Aviation services and parking can be found on the north.
- The Iowa Air National Guard utilizes the ramp and service areas on the north complex as well.
- The south quadrant of the airport is the location of the large cargo ramp as well as some general aviation services.
- Air carrier ground operations are primarily found on the east side of the airport.
- The mix of pilot experience includes basic students, through high-time air carrier and military pilots.
- This mix along with varying aircraft performance capabilities, creates a challenge for pilots and controllers.
- Hot Spot 1 is located at the intersection of TWY D and RWY 05/23.
- Hot Spot 2 is located at the intersection of TWY P and RWY 13/31.
- These Hot Spots denote the same problem.
  - Even after acknowledging Hold Short instructions, Pilots sometimes fail to hold short of the Hold Short Lines and enter the Runway Safety Area without a clearance.
  - An issue may be the close proximity of the RWY Hold Short lines to the TWY intersections.
  - Remember that you must have a clearance to cross any RWY – active or not.
- Hot Spot 3 is located at the approach end of RWY 05.
  - It is a long distance from the TWR and field geometry makes it very difficult for the TWR controller to see aircraft that are ready to depart.
  - Pilots can help by only calling the TWR when they are number 1 in sequence for takeoff or telling TWR their sequence number when making initial contact.
- If in doubt of your clearance, instruction, or location, do not hesitate to ask the TWR.

2. Airspace

The airspace at DSM is Class C with a ceiling up to and including 5000’ MSL. (Refer to Sectional Chart)

Class C Airspace Requirements (CFR §91.130 and AIM 3-1-4; 3-2-4)

Visibility	3 statute miles
Distance from Clouds	500 feet below | 1,000 ft above | 2,000 ft horizontal
Communications	Establish communications (controller response)
Pilot	No special certification required
Equipment	Two-way radio, operable radar transponder with altitude reporting and ADS-B Out

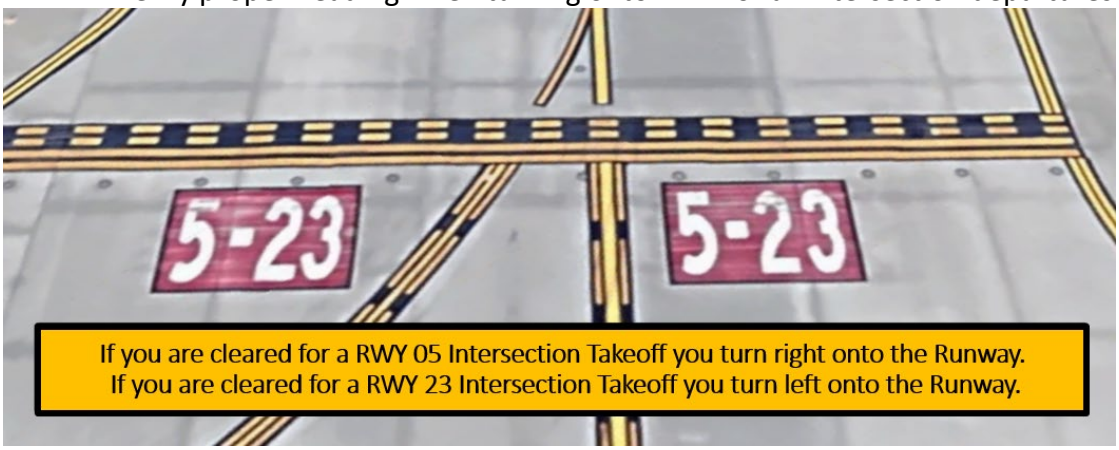
3. Cautions

Hot Spots

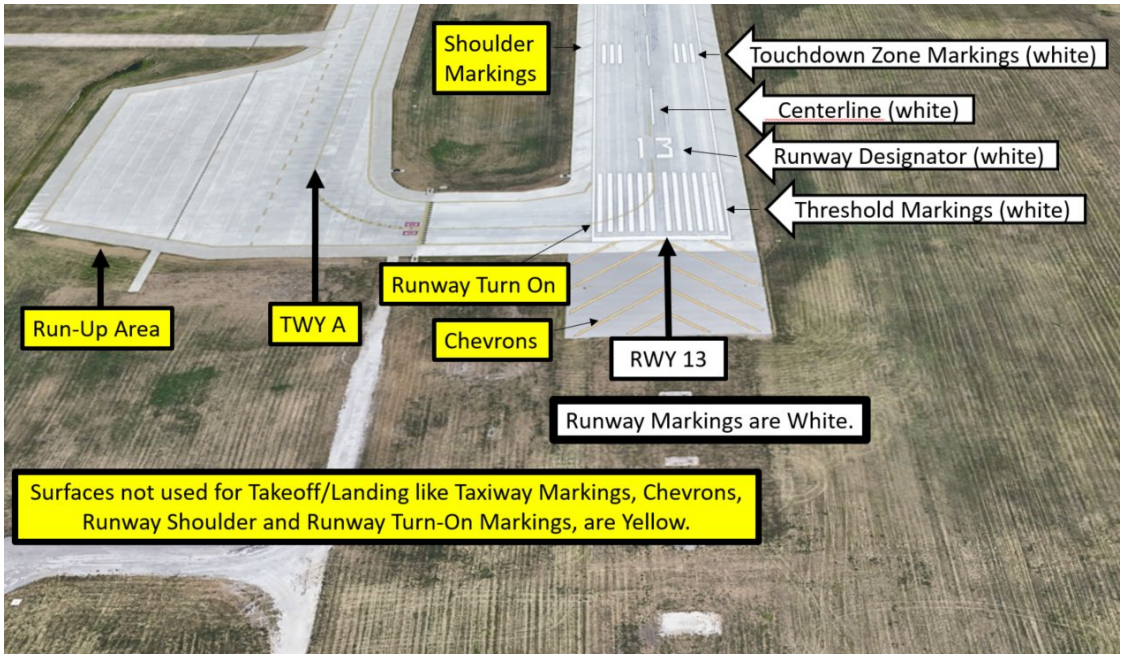
HS 1 Complex intersection area. Turns quickly lead to crossing RWY 05/23 at TWY D.
HS 2 Complex intersection area. Turns quickly lead to crossing RWY 13/31 at TWY P.
HS 3 The approach end of RWY 05 at TWY P has limited visibility from the TWR.

Departure

- ✓ Wrong Surface **Intersection** Takeoff risk exists here.
- ✓ Verify proper heading when turning onto RWY for all intersection departures.



DO NOT takeoff or land on a TWY.



Landing

- ✓ Full-length parallel taxiways may lead to some confusion.

- TWY D extends full length and north of RWY 13/31.
- TWY P extends full length and south of RWY 05/23.

✓ Use caution when landing over raised lights in the over-runs and RWY thresholds.

Surface Risk – Movement Area

✓ Review Hot Spots 1-3 (above).
✓ Pavement condition is fair on 1000' asphalt portion of RWY 05/23.
✓ TWR has limited visibility on TWY P7 and the approach end of RWY 05.

4. Communications

DSM Tower (TWR) operates continuously.

5. From the DSM Control Tower

Local Information that your DSM TWR controllers want you to know.

General

✓ Always communicate your intentions.
✓ If we know that you would like a touch and go rather than a full stop then it may drastically change our plan.
✓ If you are a student then please tell us, we are always happy to help if we know you need a little extra.
✓ If you are unsure or you see something that doesn't look right then don't be afraid to ask.

Traffic Patterns

✓ Be ready for changes.
✓ We have a very fluid operation, you may need to tighten your pattern, be ready to fly through final, change the direction of the pattern, or hold depending on our rapidly changing traffic demands.
✓ We are always mixing propeller aircraft with commercial and business jets, this can be challenging for pilots and air traffic controllers!

Ground

✓ Study the airport surface before you arrive.

✓ If you are not sure what your instruction is then don't go on the runway.
✓ Multiple construction projects including FBO relocations are resulting in random taxiway closures. You may be issued a taxi route that you are not anticipating.

Take-off/Departure

✓ Sometimes we will give you an "immediate" take off or say "no delay".

- This usually means that we have a jet arrival within 2 minutes of the threshold.
- Please advise the TWR, if you are unable to perform an immediate departure, prior to entering the runway.

Arrival/Landing

- ✓ Sometimes you will be sequenced closely behind another arrival. In fact, there may be two arrivals on the runway at the same time. Standard practice requires a 3000 ft. spacing between you and the previous arrival, if you are operating a small, single-engine propeller-driven aircraft. Your controllers are monitoring this.

Special Traffic (Military / Commercial / Helicopter, etc.)

- ✓ DSM has a lot of medevac helicopter traffic moving to and from the downtown DSM area.
  - These aircraft will frequently fly over or very near DSM airport, sometimes traffic flow will stop or change abruptly to accommodate them.
- ✓ We also have National Guard helicopters which may land and depart from the guard base east of taxiway D on the north side of the airport.

6. Additional Information for DSM

- ✓ Informal noise abatement procedures in effect. Expect ATC to assign preferred RWY.
- ✓ We have a lot of bird activity, always be on the lookout for swallows, migratory birds, and soaring raptors.

End of DSM Specific Section

General Information Section

1. Some Best Practices

Do:

- ✓ Refer to the airfield diagram and/or airport moving map while stopped and/or prior to taxiing.
- ✓ Keep your eyes outside to observe traffic, potential threats and airport signs and markings.
- ✓ Ask the controller to repeat instructions and clearances if you are not sure.
- ✓ Ask for progressive taxi instructions if you are unfamiliar or have lost situational awareness.
- ✓ Taxi your aircraft to the side of the run-up area to allow other aircraft to taxi around you if you are not ready for departure.
- ✓ Advise TWR on initial contact (ground or air) if you are a student pilot.
- ✓ Using runway and/or taxiway designators to describe your position, and turning on exterior lights will assist the controller in identifying you.
- ✓ Acknowledge all ATC instructions and read back all hold short restrictions with your call sign.
- ✓ Always make sure that your aircraft is completely behind all hold-short lines.
- ✓ Advise GND/TWR if you want an intersection departure and wait for TWR clearance to take off. There may be a delay due to wake turbulence or traffic.
- ✓ When using any RWY, verify mag heading and look for the white markings to avoid a wrong surface event.
- ✓ Consider backing up a visual approach with an underlying instrument (ILS/LOC/GPS) approach if time and workload allows.
- ✓ Remember that you must have a clearance to cross all RWYs, active and not active.
- ✓ Use caution when taxiing smaller aircraft/helicopters in the vicinity of larger aircraft/helicopters. Controllers may use the words rotor wash, jet blast, or prop wash when issuing cautionary advisories. A general rule of thumb is 100 feet behind a jet aircraft.
- ✓ Reference GPS User Waypoint, or if available, the assigned runway's instrument approach. If unsure that you are aligned for the assigned runway, announce going around and why.
- ✓ Verify proper heading prior to starting takeoff roll on all departures. Consider checking and calling out, Wet compass, runway heading, runway paint/signage for departure runway, and directional gyro shows runway heading.

Do Not:

- ✓ Do not taxi on your own without obtaining taxi instructions from ATC.
- ✓ Do not cross an active RWY without specific controller permission to cross that RWY.
- ✓ Do not use a RWY as a turn-off during landing unless cleared to do so by TWR.
- ✓ Do not wait until you are ready for departure to request an IFR clearance. Making your request to clearance delivery or ground control prior to taxiing will allow time for ATC coordination.
- ✓ Do not, on departure, leave TWR frequency while still in TWR airspace unless previously approved. (Note: frequency change outside of TWR airspace is at pilot's discretion.)

2. Lost Communications Tips (Additional information in the Aeronautical Information Manual (AIM) Chapter 6 - Section 4)

- ✓ Squawk **Transponder Code 7600** if you experience loss of two-way radio capability.
- ✓ If you can hear other aircraft but nobody responds to your calls then you should check for proper

frequency selection, popped circuit breaker, radio panel setup, or an improperly hooked up intercom.

- ✓ Weak batteries in intercoms are often the cause of "radio failure". Your emergency checklist may come in handy for checking other areas specific to your aircraft.
- ✓ If you can't hear anything on the receiver, check the volume control, squelch, intercom, circuit breaker, or a stuck mike.
- ✓ After you have determined the extent of the radio failure, you can determine how to communicate with the ATC.

3. Emergencies

- ✓ Each pilot in command who (though not deviating from a rule of this subpart) is given priority by ATC in an emergency and shall submit a detailed report of that emergency within 48 hours to the manager of that ATC facility, if requested by ATC. Ref: CFR §91.123 (d)
- ✓ It is extremely rare that a pilot is asked to justify declaring an emergency. In most cases, when a report is needed, it can usually be accomplished with a phone call.
- ✓ Additional information is also found in the AIM in Chapter 6 – Emergency Procedures

4. Special VFR (AIM 4-4-6)

- ✓ Special VFR is primarily intended to offer pilots a way to operate into, out of, and through tower controlled airspace when local weather restricts the visibility or ceiling to below VFR minimums.
- ✓ There are times, for instance, when visibility is below three miles due to ground fog or the ceiling is below 1000 feet AGL due to a cold front passage, it may be advantageous to use the Special VFR rules to be able to get to VFR conditions.
- ✓ There are rules and conditions that apply to Special VFR and the one that controllers deal with the most often is the requirement that the pilot must request the clearance. We cannot offer it, as we cannot determine your abilities as a pilot and have no wish to talk you into accepting a clearance that may be beyond your experience level.

The basic requirements for Special VFR are:

- ✈ The clearance must be requested by the pilot.
- ✈ If it is after sunset and before sunrise the pilot requesting the clearance must be IFR rated and the aircraft must be certified for IFR flight.
- ✈ A minimum of 1 mile visibility must exist as reported by the tower.

What you may do with a Special VFR clearance:

- ✈ You may depart for another destination
- ✈ You may transition
- ✈ You may enter and land
- ✈ You may do touch and go landings

End of General Section