# **Taxiing**

## **Objective**

To ensure the applicant learns and can exhibit a clear understanding of taxi procedures and how to taxi safely and properly.

### **Purpose**

Schedule

Every flight begins with taxiing. This lesson introduces aspiring pilots to taxi procedures, and emphasizes the special safety considerations that all pilots must be aware of during taxi operations.



•	Ground Lesson: 5 minutes - In the airplane Initial ■ Before Flight: 5 minutes - Introduction and Demonstration Every Flight ■ Before Flight: 5 minutes - Student Performs	<ul><li>Airplane Checklist</li><li>Airport Diagram</li></ul>	
Student Actions		Instructor Actions	
•	Ask any questions, receive study material for the next lesson.  Watch linked video.  Review listed references.	<ul> <li>Deliver the ground lesson (below).</li> <li>Demonstrate the maneuver in flight.</li> <li>Debrief after each flight.</li> </ul>	

**Equipment** 

### **Completion Standards**

- **Ground**: Student can explain the basics of taxiing and how to steer the airplane on the ground.
- Flight: Student can taxi the airplane by doing the following:
  - Performing a Before Taxi checklist, checking the brakes, and visually clearing the area.
  - Using an airport diagram to plan the taxi route.
  - Maintains vigilance in non-movement areas and around other airplanes.
  - Maintaining taxiway centerline, taxiing at an appropriate speed, and using the throttle and brakes properly.
  - Maintaining a sterile cockpit and avoiding runway incursions.

#### References

- ERAUSpecialVFR "Taxiing Lesson 1"
  - YouTube https://www.youtube.com/watch?v=pK7KqQXPb7I
- FAA-H-8083-3B (Airplane Flying Handbook) Chapter 2, Page 14-17 [Taxiing]
- FAA-S-ACS-6B (Private Pilot ACS) Area II Task D
- FAA-S-ACS-7A (Commercial Pilot ACS) Area II Task D
- FAA-S-8081-6D (CFI PTS) Area V Task D

#### **Ground Lesson Outline**

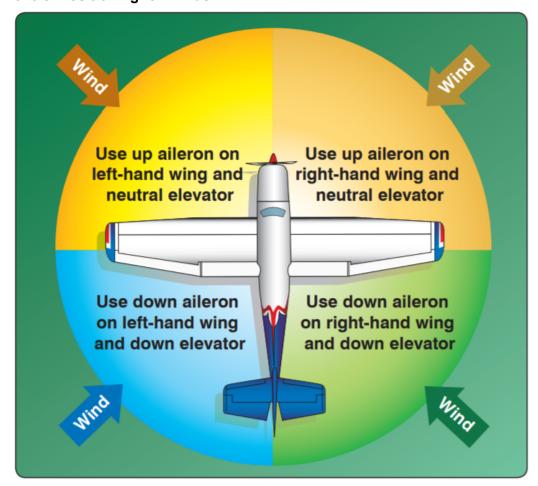
- Before Taxi Checklist
  - o Brake Check
  - Instrument Check
- Taxi Technique
  - o Use of Rudder Pedals Differences from driving a car
  - Use of Throttle and Brakes
  - Proper Appearance of Taxiway Centerline Parallax
  - Flight Control Positioning for Winds "Turn Towards the Wind/Dive Away from the Wind"
    - See Supplement below
- Taxi Safety
  - o Wingtip Clearance
  - Avoiding Other Airplanes Parked and Not Parked
  - o Avoiding Hazards in Non-Movement Areas
  - o Taxi Clearances
    - ATC Light Gun Signals See Supplement below
  - Use of Airport Diagrams
  - Minimize Distractions / Sterile Cockpit / Situational Awareness
  - o Runway Incursion Avoidance (see lesson on Runway Incursion Avoidance [Area II, Task B])
  - Taxiway Markings
- Non-Towered Airport Taxi Operations
  - o CTAF Taxi Self-Reporting
  - Visual scanning for conflicting airplanes, cars, etc.
  - Hazardous / Poor Condition Taxiway Surfaces

#### **Common Errors**

- Improper use of brakes.
- Improper positioning of the flight controls for various wind conditions.
- Hazards of taxiing too fast.
- Hazards associated with the failure to comply with airport/taxiway surface marking, signals, and ATC clearances or instructions.
- Hazards of becoming distracted while taxiing.
- Hazards associated with failing to adhere to sterile cockpit procedures.

# **Ground Lesson Supplements**

# • Flight Control Positioning for Winds



## • ATC Light Gun Signals

Color and Type of Signal	Movement of Vehicles, Equipment and Personnel	Aircraft on the Ground	Aircraft in Flight
Steady green	Cleared to cross, proceed or go	Cleared for takeoff	Cleared to land
Flashing green	Not applicable	Cleared for taxi	Return for landing (to be followed by steady green at the proper time)
Steady red	Stop	Stop	Give way to other aircraft and continue circling
Flashing red	Clear the taxiway/runway	Taxi clear of the runway in use	Airport unsafe, do not land
Flashing white	Return to starting point on airport	Return to starting point on airport	Not applicable
Alternating red and green	Exercise extreme caution!!!!	Exercise extreme caution!!!!	Exercise extreme caution!!!!