### ST. LOUIS DOWNTOWN AIRPORT RUELS AND REGULATIONS SECTION V – MOTOR VEHICLES

No person shall operate motorized equipment of any kind on the Airport without a valid Operator's License and prior permission from the Airport Director.

A card to operate the electronic gate controlling access to ramp areas may be obtained provided:

- 1. Airport management considers access to be necessary or required.
- 2. Requester supplies a copy of current vehicle liability insurance for any and all vehicles they drive onto ramp areas. Minimum liability coverages are as follows:
  - a. \$250,000 Per Person
  - b. \$500,000 Per Accident
  - c. \$100,000 Property Liability Per Accident, or
  - d. \$500,000 Combined liability limit
- 3. Approved card holders must keep the liability insurance, referred to in 1.(b.), current at all times. Failure to do so shall result in their gate card(s) being invalidated.
- 4. Card holders are not to pass their gate card to any other person to use. Violation of this provision will result in the gate card(s) being invalidated.

#### **Rules of Operation**

- 1. No person shall, while on ramps, taxiways or other active aircraft areas:
- 2. Operate a motor vehicle in a reckless or negligent manner.
- 3. Operate a motor vehicle at a speed in excess of 10 MPH.
- 4. Fail to give proper signals.
- 5. Fail to obey posted directions or other traffic signs.
- 6. Operate a motor vehicle while under the influence of intoxicating beverages or narcotics.
- 7. Operate a motor vehicle while carrying more passengers than that for which the vehicle was designated, or, while any occupant thereof is riding outside the body of that vehicle, or, with arms or legs protruding therefrom.
- 8. Operate a motor vehicle inside any hangar unless the vehicle is equipped with exhaust protectors which prevent the escape of sparks or other flame propagation.
- 9. Park so as to block or obstruct any entrance or fire gate.
- 10. Vehicular and pedestrian traffic shall, at all times, yield the right of way to aircraft.
- 11. Vehicular and pedestrian traffic shall, at all times, pass to the rear of taxiing aircraft or aircraft on which the propeller is turning.
- 12. All vehicles authorized to operate on taxiways and runways shall:
- A. Have constant radio communication with ground control operators, or, be escorted by a vehicle with ground control communication.
- B. Receive permission from ground control operators before entering or moving from place to place on any taxiway or runway. Unauthorized entry is a Class C Misdemeanor, punishable by fine.
- C. Have an amber or white rotating or flashing beacon on top of said vehicle, or, be escorted by a vehicle so equipped.
- D. When parking adjacent to a runway shall park at a distance of at least 100 feet to the outside of the runway lights.
- E. Between the hours of sunset and sunrise, have operating headlights and taillights visible for at least 500 feet. Operators must avoid shining their headlights toward operating aircraft or active landing areas to prevent creating landing illusions or blinding pilots.

#### A. Parking

- A. No person shall park a motor vehicle:
  - i) In any area other than those specifically established for parking.
  - ii) In parking areas other than in positions designated by marked lines or posted signs.
  - iii) Adjacent to, or in front of T-Hangars.
  - iv) T-Hangar tenants shall park their vehicles in designated parking areas or inside their respective hangars only.

v) Airport management is authorized to tow, otherwise move, or immobilize vehicles parked in violation of published rules or posted signs. Such movement or immobilization shall be at the expense of the owner, and Airport management assumes no liability for any damage arising from said movement.

### B. Vehicle and Aircraft Repair

In order to protect the general use areas of the Airport, and prevent encroachment upon the rights of users, no owner or other person shall clean or make repairs to vehicles or aircraft anywhere other than in areas designated for that purpose.

#### C. Tampering

Except as otherwise provided, no person, other than the owner, shall move, interfere or tamper with any motor vehicle or aircraft, or put into motion, take or use any part therefrom, without the permission or the owner, or satisfactory evidence of the right to do so duly presented to Airport management.

#### D. Ground Transportation

No vehicle or aircraft for hire shall load or unload materials or passengers at any place other than areas designated by Airport management.

#### E. Violations

Violations of any of the above rules and regulations can result in the offenders gate card(s) being invalidated and ramp access privileges revoked.

#### **Driving on the Non-Movement Areas**

- 1.1. Non-movement areas on St. Louis Downtown Airport include the aircraft parking ramps and hangar areas. These areas are **not** under control of the ATCT. Anyone authorized to operate a motorized vehicle on the airside may do so on the non-movement areas without being in positive radio contact with the ATCT.
- **1.2.** Driving. Operating within the ramp areas requires the vehicle driver to exercise extreme caution as aircraft are always moving, aircraft passengers may be walking from an aircraft to the gate, and noise levels are high.

#### Vehicle drivers should—

- **1.2.1.** Not drive faster than 10 mph on the aircraft parking ramps or hangar areas.
- **1.2.2.** Never drive between aircraft that are parked closely together on the ramp.
- **1.2.3.** Watch cockpit blind spots—pilots typically cannot see behind or below the aircraft.
- **1.2.4.** Watch for blind spots around the corners of buildings and hangars—stop your vehicle at the corner of buildings and proceed slowly and cautiously until you can clearly see there are no on-coming aircraft or vehicles.
- **1.2.5.** Avoid jet blast or prop wash, which can blow debris or overturn vehicles.
- **1.2.6.** Be aware and avoid moving propellers that can cause damage, injury, or death.
- **1.2.7.** Be aware of other vehicle movements—you may not hear them approaching due to aircraft engine noise.
- **1.2.8.** Yield to aircraft, passengers, and emergency vehicles, which ALWAYS have the right-of-way on any portion of the airport.
- **1.2.9.** Park only in designated vehicle parking spaces or inside individual aircraft hangars.
- **1.2.10.** Be vigilant for both safety and security—challenge those who violate safety rules or do not seem to be familiar with the airport environment. Report suspicious drivers and pedestrians.

Parked aircraft may still have their engines running, so be aware of the hazards of jet blast or prop wash, which may overturn vehicles. A pilot's ability to maneuver quickly on the ground is limited. Propellers and jet engines can cause significant damage and injury to personnel. In addition, cockpit visibility prohibits the pilot from seeing under the nose or behind the aircraft and limits the pilot's ability to avoid ground vehicles.

1.3. Nighttime and Poor Weather Driving Conditions. Poor weather conditions (snow, fog, rain, etc.) might obscure visual cues, roadway markings, and airport signs. Vehicle operators should remain vigilant of their surroundings and operating boundaries. Watch out for snow removal equipment and aircraft operating in the vicinity under low-visibility conditions. There are additional risks present under these conditions.

#### **Driving on the Movement Areas**

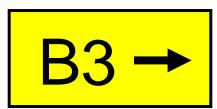
Drivers who are authorized to drive on the movement area require more training and vigilance since there are dangers associated with this area that are not present on non-movement areas. In addition to the principals for driving on the non-movement area, drivers who have access to the movement area must be cognizant of the meaning of airfield signs, markings, and lighting configurations. Additionally, they must be able to communicate with air traffic control (ATC) and be able to follow ATC directions.

- **2.1. ATCT Control.** Movement areas are defined as the runways, taxiways, and other areas of the airport that are used for taxiing, hover taxiing, air taxiing, and takeoff and landing of aircraft, exclusive of loading ramps and aircraft parking areas. Movement areas are considered "positive control," meaning that all vehicle operators will need permission from ATC before entering the area.
- **2.2. Authorized Vehicles.** Only those vehicles necessary for airport operations may enter a movement area. Therefore, fuel trucks, maintenance vehicles, tugs, catering trucks, and other nonessential vehicles should not be permitted to enter these areas. Exceptions may include JetAviation/Midcoast-authorized vehicles with appropriately trained personnel. Airport Operations/Maintenance shall coordinate all other vehicle operations within the movement areas.

#### 2.3. Taxiways.

- **2.3.1. Designations.** Aircraft use taxiways to move to and from the aprons and the runways. Taxiways are designated by letters or by a letter/number combination such as A, B, G2, or B3.
- **2.3.2. Lighting.** Taxiways are lighted with **blue** edge lighting and/or reflectors.
- **2.3.3. Signs.** The signs used on taxiways are direction, destination, location, and taxiway ending marker signs.

<u>Direction and Designation Signs</u> have **black lettering** and a **directional arrow** or **arrows** on a **yellow background**. The arrow indicts the direction to that taxiway, runway, or destination.



**Taxiway Directional Sign** 

<u>Location Signs</u> have **yellow lettering** on a **black background**. The location sign below indicates that the operator of the vehicle/equipment is located on the named taxiway or runway.

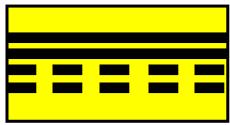


**Taxiway Location Sign** 

<u>Combinations of Signs</u> are used throughout the airport where taxiways intersect. The combination of signs below indicates that the operator of the vehicle/equipment is located on taxiway B where taxiway B3 joins on the right.



Runway Safety Area/Object Free Zone (OFZ) and Runway Approach Area Boundary Signs, when required, identify the boundary of the runway safety area/OFZ or the runway approach area to the pilot and vehicle operator. The driver can use these signs to identify when the vehicle is clear of the runway environment. It has a **black inscription** that depicts the hold line marking on a **yellow background**.



Runway Safety Area/OFZ and Runway Approach Boundary Sign

**2.3.4. Markings.** Pavement markings on taxiways are always **yellow.** The taxiway centerline is painted on all taxiways. On the edges of some taxiways, there is a solid, double yellow line or double-dashed line. If pavements are usable on both sides of the line, the lines will be dashed; if not, the lines will be solid.

Runway Holding Position Markings are located across each taxiway that leads directly onto a runway. These markings are made up of **two solid lines** and **two broken yellow lines** and denote runway holding position markings. These markings are always co-located with a Runway Holding Position Sign. A vehicle operator must not cross from the solid-line side of the marking without first obtaining clearance.



**Runway Holding Position Marking** 

Non-Movement Area Boundary Markings consist of **two yellow lines** (one solid and one dashed). The solid line is located on the non-movement area side, while the dashed yellow line is located on the movement area side. A vehicle operator is not to cross from the solid-line side without first contacting the ATCT and obtaining a clearance to operate on the movement area.



Non-Movement Area Boundary Marking

#### 2.4. Runways.

- **2.4.2. Designations.** Runways are areas where aircraft land and take off. Runways are always designated by a number. St. Louis Downtown Airport has three runways and all can be used in either direction. Our crosswind runway is runway 5 and 23. An aircraft taking off on runway 23 is headed 230 degrees and an aircraft taking off on runway 5 is headed 050 degrees. Our other two runways lay parallel to each other and are differentiated by the letters L and R for left and right. Our primary and longest runway is runway 12R and 30L. The parallel runway (on the north side of the airport) is runway 12L and 30R.
- **2.4.3. Lighting.** Runways are lighted with a variety of colored lights.

<u>Runway Edge-lights</u> are white. Runway 30L has an instrument approach, therefore the last 2,000 feet of the runway will be yellow in color.

Runway End/Threshold Lights are split lenses that are red/green.

#### 2.4.4. Signs.

<u>Mandatory Holding Position Signs for Runways</u> have white numbering/lettering on a red background with a white border. These are located at each entrance to a runway and at the edge of the runway safety area/obstacle-free zone and are co-located with runway holding position markings. Do not proceed beyond these signs until clearance is given by the ATCT to enter the runway.



#### **Runway Hold Sign**

Instrument Landing System (ILS) Holding Position Signs have white letters on a red background with a white border. These signs tell pilots and vehicle operators where to stop to avoid interrupting a type of navigational signal used by landing aircraft. This is a critical area, and a vehicle/equipment operator must remain clear of it. If a vehicle proceeds pass this ILS marking, it may cause a false signal to be transmitted to the landing aircraft.



Holding Position Signs for Runway Approach Areas. The inscription on a sign for a runway approach area is the associated runway designation followed by a dash and the abbreviation APCH for approach. This sign has white numbering on a red background with a white border. The sign is installed on taxiway B-2 and is located in an approach area where an aircraft on the taxiway would either cross through the runway safety area or penetrate the airspace required for the approach or departure runway.



**Runway Exit Sign** is a destination sign located prior to the runway/taxiway intersection on the side and in the direction of the runway where the aircraft is expected to exit. This sign has **black lettering** and a **directional arrow** on a **yellow background.** 



**Runway Exit Sign** 

#### 2.4.4. Markings.

**Pavement markings on a runway are white**. Runway Threshold Markings and Runway Threshold Bars, Runway Aiming Point Markings, Runway Designation Markings, Runway Touchdown Zone Markings, Runway Centerline Markings, and Runway Side Stripes are white. The only nonwhite lines on a runway are yellow lead-in/-off lines that extend from the runway centerline and hold lines for a specific operation known as land and hold short.

#### **Communications**

- **3.1.** Any vehicle driving on the **movement areas** (**runways and taxiways**) **must** be in contact with the ATCT or capable of monitoring and transmitting on the CTAF. Vehicle operators must always monitor the appropriate radio frequency when in the movement areas. Permission must be requested and clearance given prior to driving on a movement area. A vehicle that is equipped with a radio may escort vehicles without radios. When a movement area is closed for construction, vehicles may traverse that area without ATCT contact but must be escorted if their travels require them to cross an active movement area.
- **3.2.** The ATCT controller may use separate or common radio frequency to control all ground traffic, vehicle and aircraft, on the movement areas. The frequency is only to be used to get clearance onto and off the movement areas. When the ATCT is closed, the CTAF should be used to announce a driver's intentions when operating within the movement area.
- **3.3. Phraseology.** Vehicle operators must contact the ATCT ground controller each and every time they proceed onto or leave the movement area. When proceeding onto a movement area, vehicle operators must tell the controller three things: **WHO you are, WHERE you are, and WHAT your intentions are.** Vehicle operators must always acknowledge all communications so ground control and other persons know that the message was received. **Vehicle operators must always give aircraft and ground control transmissions priority unless an emergency exists.** Very high frequencies are for the primary use of aircraft and ATCT personnel. Some typical transmissions are as follows:
  - Downtown ground control, this is Airport 21 at Bravo 6. Request permission to cross Runway 30 Left."
  - Downtown ground control, this is Airport 21 at Taxiway Alpha. Request clearance south on runway 5 for a light inspection."

Reply transmissions may be brief, such as—

• ATCT: "Airport 21, hold short of runway 30 right."

• Driver: "Airport 21 holding short of runway 30 right."

• ATCT: "Airport 21 cleared south on runway 30 right."

"Please expedite, landing aircraft on a 10 mile final for runway 30 right."

• Driver: "Airport 21 cleared south on runway 30 right, will expedite."

"Ground control, Airport 21 is clear of runway 30 right. Driver:

**NOTE:** If you are unsure what the controller has said, or if you don't understand an instruction, you should ask the controller to repeat it. Good communications only occur when each party knows and understands what the other is saying.

#### 3.4. Common Use Phrases.

What Is Said:	What It Means:
Acknowledge	Let me know you have received and understand this message.
Advise Intentions	Let me know what you plan to do.
Affirmative	Yes.
Correction	An error has been made in the transmission, and the correct version follows.
Go Ahead	Proceed with your message only.
Hold/Hold Short	Phrase used during ground operations to keep a vehicle or aircraft within a specified area or at a specified point while awaiting further clearance from air traffic control.
How do you hear me?	Question relating to the quality of the transmission or to determine how well the transmission is being received.
Immediately or without delay	Phrase used by ATC when such action compliance is required to avoid an imminent situation.
Negative	"No" or "permission not granted" or "that is not correct."
Out	The radio conversation is ended, and no response is expected.
Over	My radio transmission is ended, and I expect a response.
Read Back	Repeat my message to me.
Roger	I have received all of your last transmission.
Stand By	Means the controller or pilot must pause for a few seconds, usually to attend to other duties of a higher priority. Also means to wait as in "stand by for clearance." The caller should reestablish contact if a delay is lengthy.
Unable	Indicates inability to comply with a specific instruction, request, or clearance.
Verify	Request confirmation of information.
Wilco	I have received your message, understand it, and will comply with it.

**3.5. Phonetic Aviation Alphabet.** Because some letters have similar sounds, like B and P, the international aviation industry uses the following words to reduce confusion. For example; Taxiway B would be referred to as Taxiway Bravo on the radio.

A	ALFA	N	NOVEMBER
В	BRAVO	0	OSCAR
C	CHARLIE	P	PAPA
D	DELTA	Q	QUEBEC
E	ЕСНО	R	ROMEO
F	FOX-TROT	S	SIERRA
G	GOLF	T	TANGO
Н	HOTEL	U	UNIFORM
I	INDIA	V	VICTOR
J	JULIET	W	WHISKEY
K	KILO	X	X-RAY
L	LIMA	Y	YANKEE
M	MIKE	Z	ZULU

**3.6. ATCT Light Gun Signals.** Air traffic controllers have a backup system for communicating with aircraft or ground vehicles if their radios stop working. The controller has a light gun in the tower that can send out different colored lights to tell the pilot or driver what to do. If a vehicle operator experiences a radio failure on a runway or taxiway, the operator should vacate the runway as quickly and safely as possible and contact the ATCT by other means, such as a cellular telephone, and advise the ATCT of the situation. If this is not practical, then the driver, after vacating the runway, should turn the vehicle toward the tower and start flashing the vehicle headlights and wait for the controller to signal with the light gun.

Light gun signals, and their meaning, are as follows:

Steady Green OK to cross runway or taxiway.

Steady Red STOP!

Flashing Red Move off the runway or taxiway.

Flashing White Go back to where you started.

Alternating Red and Green Use extreme caution.

# 3.7. Safety. The FAA defines runway incursion as "Any occurrence at an airport involving the incorrect presence of an aircraft, vehicle or person on the protected area of a surface designated for the landing and take off of aircraft."

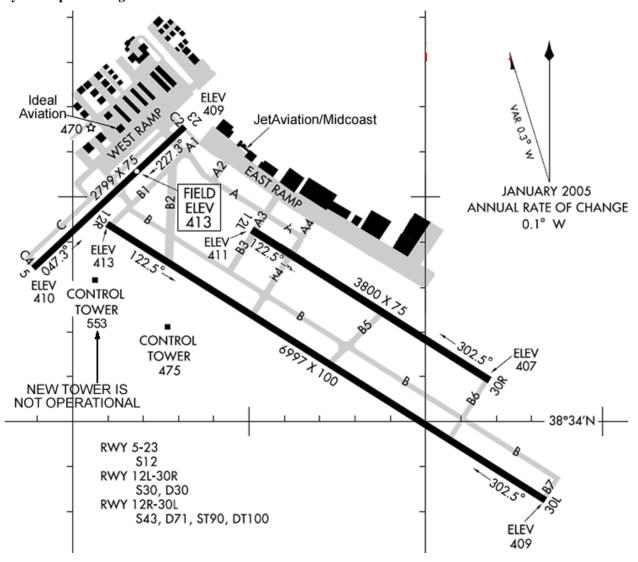
Runway incursions are primarily caused by error in one or more of the following areas:

- Pilot/ground vehicle/controller communications
- Airport familiarity
- Loss of situational awareness

An example of an incursion is a vehicle at an airport with an operating ATCT straying onto a runway in front of an aircraft causing the pilot to take an action to avoid a collision.

When driving on the airfield, vehicle operators need to always be aware of their location and the meaning of all pavement markings, lights, and signs. When on the aprons and taxiways, stay away and steer clear of aircraft. Aircraft always have the right-of-way.

NOTE: Any individual involved in a runway incursion will receive remedial airfield driver's training given by the airport management staff.



## $\frac{\textbf{GROUND VEHICLE OPERATING FAMILIARIZATION PROGRAM}}{\textbf{TRAINING RECORD}}$

Driver's Name	:					
Employee's Po	sition:	_				
Company Nam	e:	_				
Driver's Licens	se State and Number:	_				
Driver's Licens	Driver's License Expiration Date:					
I agree to abide by all rules and regulations prescribed for the operations of a vehicle within the airport operations area.						
	I certify that I hold a current and valid driver's license. If for any reason my license St. Louis Downtown Airport management immediately.	se becomes invalid,				
Sign your name	e and indicate today's date below:					
	(NAME) (DATE)					
•		•				
	PERMITTED VEHICLE OPERATING AREAS					
	Location					
[]	Non-Movement Areas Only					
[]	All Areas					
I certify that th	e above named individual has satisfactorily completed the Driver Training Prog	ram.				
Signature:						