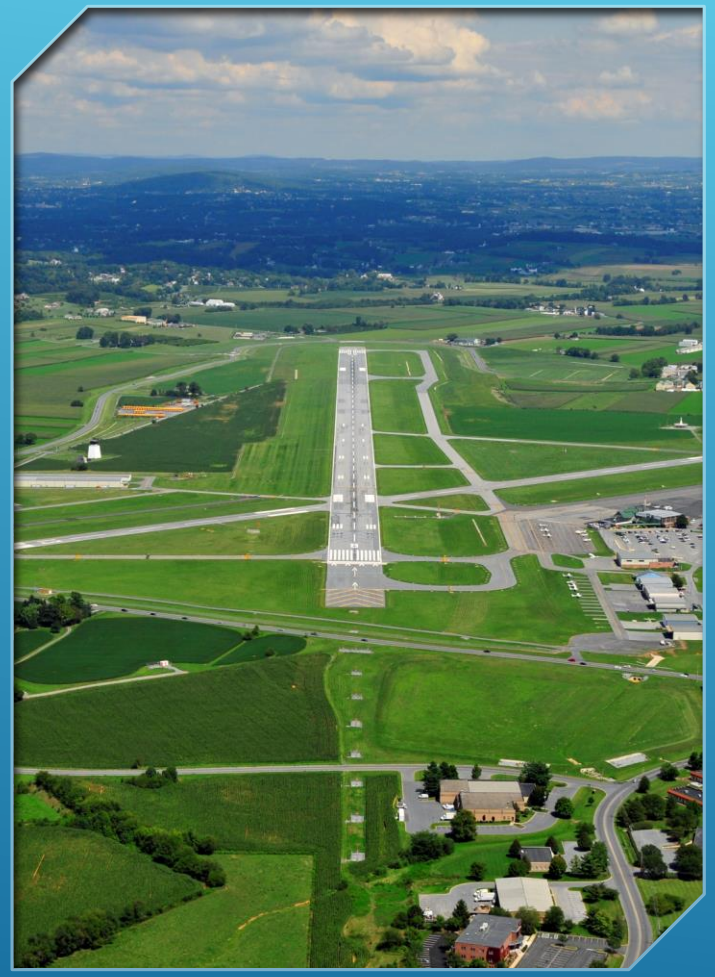
LANCASTER AIRPORT DRIVER TRAINING PROGRAM



INTRODUCTION

1. Airfield Driving Basics
2. Movement / Non-Movement Area
3. Airfield Signs, Markings & Lighting
4. Airfield Communications
5. Aviation Phonetics
6. FOD
7. SIDA Area

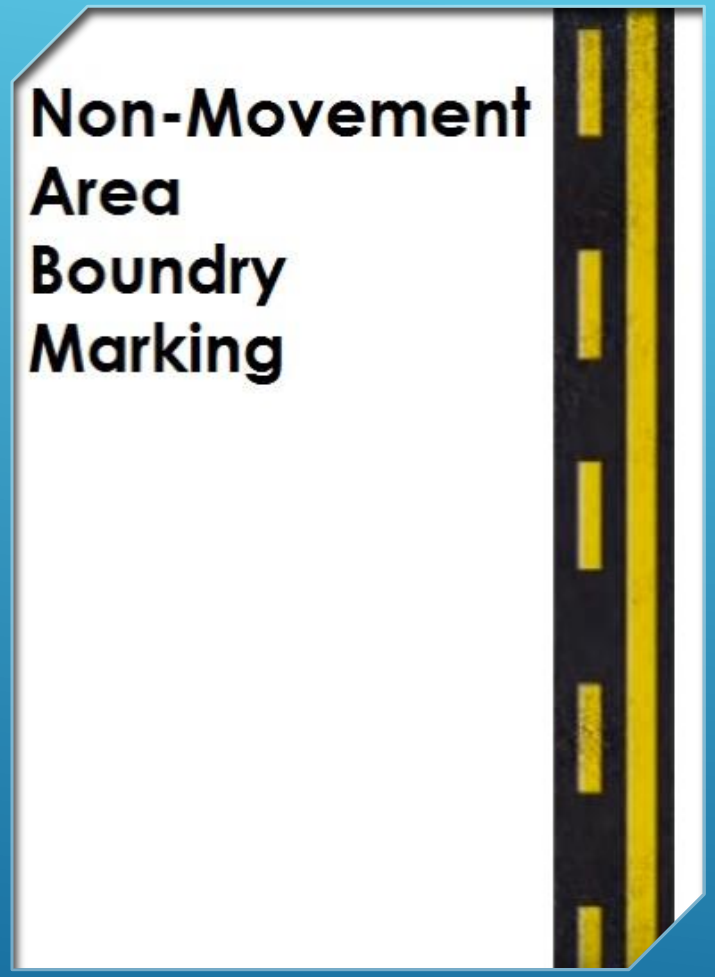
The purpose of this training is to provide you, the driver of a tug, fuel truck or other airport vehicles, adequate training to safely operate at the Lancaster Airport. Each section of this guide will provide you with information to maintain situational awareness by:

- Understanding Air Traffic Control instructions and clearances
- Knowing how to use an airport diagram
- Understanding the meaning of airfield visual aids to include airfield signs, lighting and markings

Maintaining situational awareness is vital to avoid operator errors at LNS. These errors could lead to runway incursions, accidents, loss of property and or human life.

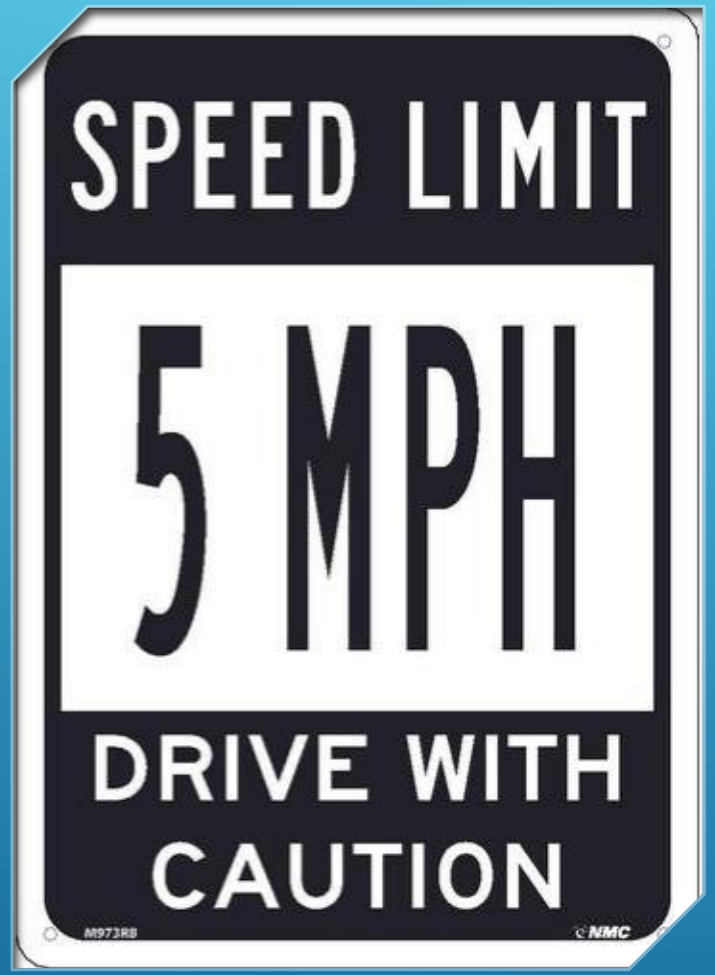
OPERATING INSIDE OF THE AIRPORT FENCE:

- Aircraft always have the right-of-way, even if you have been given an ATC clearance
- Always stay focused and alert watching for aircraft, obstructions, and potential hazards
- Maintain situational awareness at all times
- Aircraft have small windows/limited views to see vehicles and pedestrians
- Always be aware aircraft wings and engines which may extend out far beyond the edge of a taxiway or runway.
- Always use airport diagrams and be sure you are where you are supposed to be



MOVEMENT / NON-MOVEMENT AREAS

- The Airport is divided into two main areas, the movement area and non – movement area
- Movement line: Single solid line along with a single dashed line
- The side facing the solid yellow line is the non-movement side.
- The movement area is controlled by the ATC. This includes all runways, taxiways, the runup area off of RWY 31, and the safety areas.
- The non-movement area includes all other paved areas inside the fence including hangar ramps, the east and west ramp, taxi-lanes and the access road.



AIRPORT SPEED LIMITS

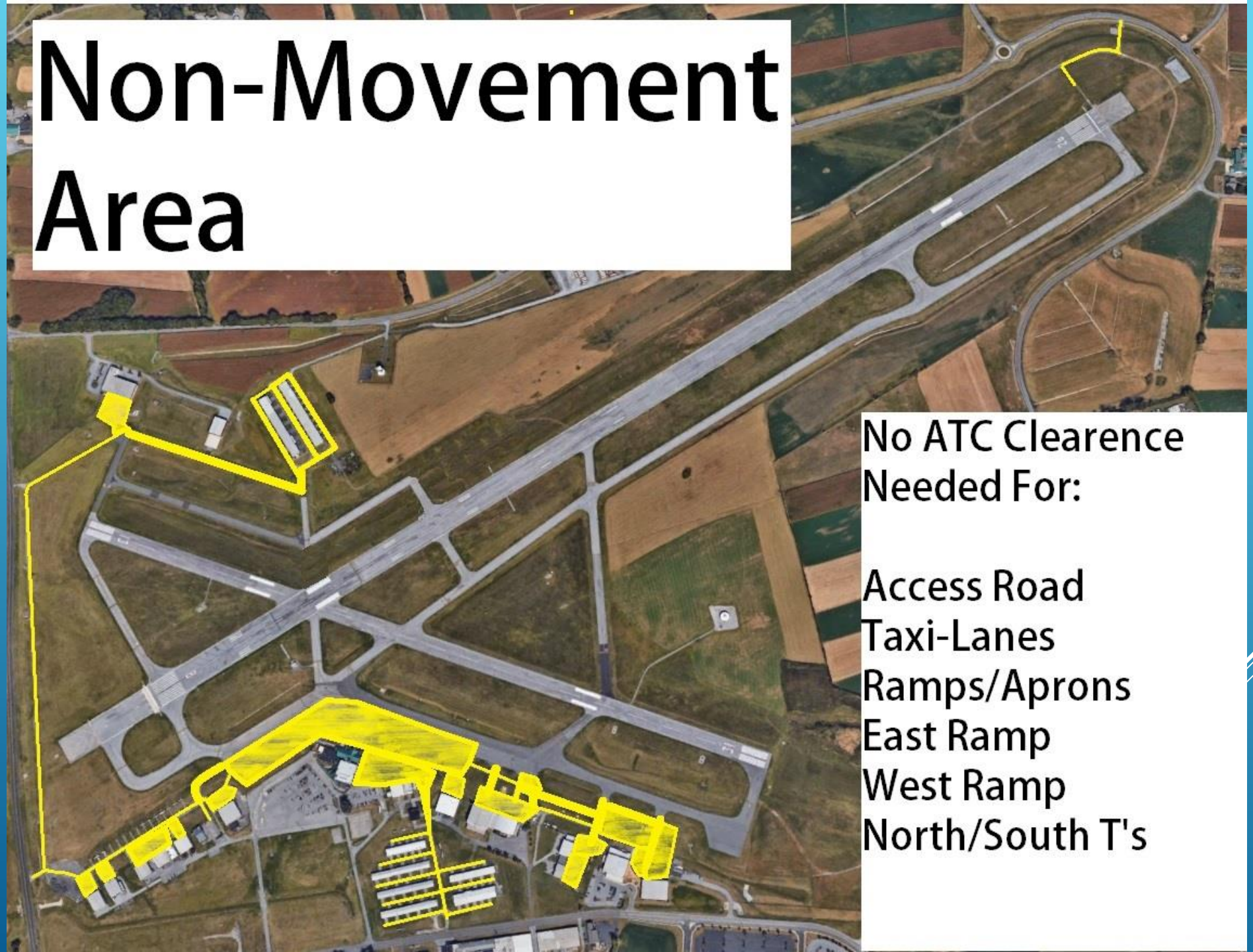
- The speed limit on ramps and within close proximity to aircraft and buildings is 5MPH
- The speed limit elsewhere on ramps and taxi-lanes is 15MPH
- Elsewhere on the airfield including access roads and movement areas, it is the vehicle operators responsibility to maintain a safe and prudent speed for the activities being conducted at all times
- The Lancaster Airport reserves the right to determine what is and is not a prudent speed in these areas
- The Lancaster Airport reserves the right to suspend driving privileges for any individual found to be in violation of these rules

Movement Area

Must Have ATC Clearance To Enter These Areas:

Runways
Taxiways
Rwy Safety Areas
VOR & ASOS
Glideslop Bldg.

Non-Movement Area



No ATC Clearence Needed For:

Access Road
Taxi-Lanes
Ramps/Aprons
East Ramp
West Ramp
North/South T's

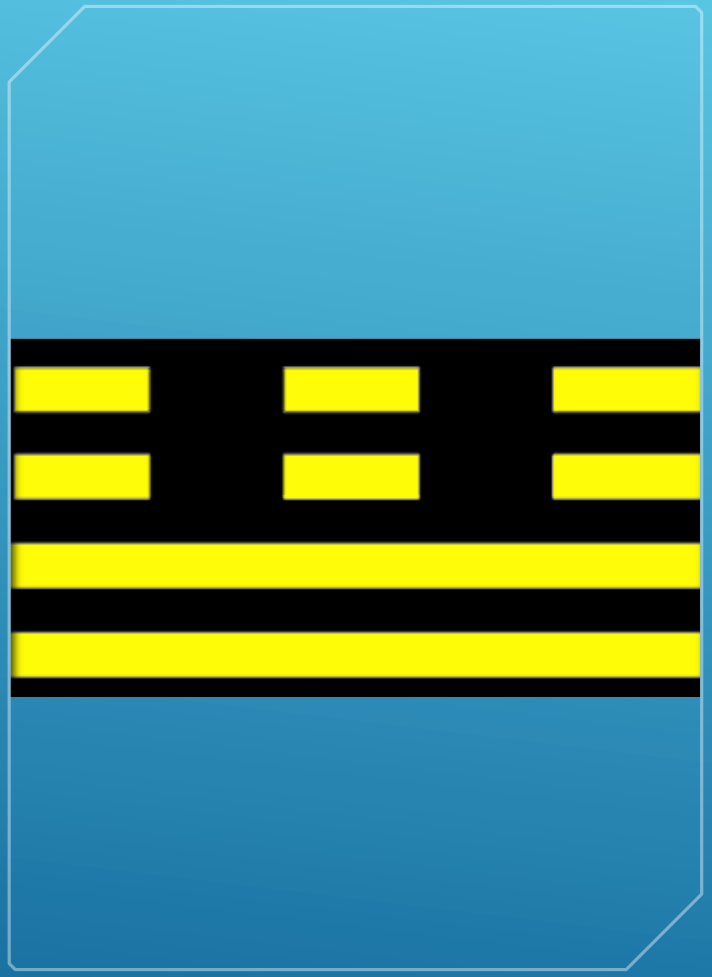
RUNWAY SAFETY AREA

- The Runway Safety Area (RSA) is the area directly surrounding the runway 8-26 & 13-31.
- The RSA is intended for use by aircraft in emergency situations.
- Vehicles and pedestrians are required to have ATC clearance when inside of these areas.
- Can be identified as anything inside of the hold-position markings which include a red surface painted sign, two solid, followed by two dashed yellow lines, and red backlit signs with white numbering

AIRFIELD SIGNS AND MARKINGS

- As a driver or pedestrian it is critical to understand airfield signs and markings which are used as navigational aids.
- Runway paint markings are white, while taxiway markings are yellow
- Critical airport information such as painted markings, signs and lights must be understood to safely operate on the airfield.
- When in doubt, always ask for clarification from ATC
- Not understanding the meaning of an airport sign or marking could lead to a runway incursion

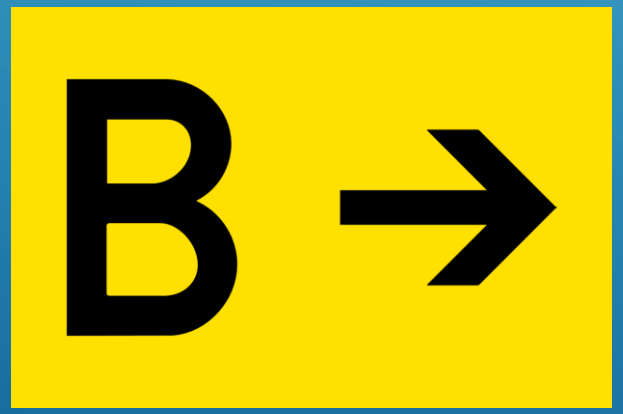
RUNWAY HOLD POSITION MARKING



- Identified with two solid and two dashed painted yellow lines
- Airport's version of a stop sign
- Always stop prior to reaching the solid lines
- Never cross the line until you have ATC clearance
- Stopping on the solid yellow line is considered a runway incursion.
- When exiting the runway, you must completely move past the solid yellow lines to be considered clear of the runway
- Always remember, when you are on the dashed side of the line, you are in the movement area. When you are on the solid side of the lines, you are in the non-movement area and YOU MUST GET ATC CLEARANCE TO ENTER.

LOCATION SIGNS AND MARKINGS

- Black background with yellow letters
- These signs indicate your location
- Remember "Black Square, You're There"

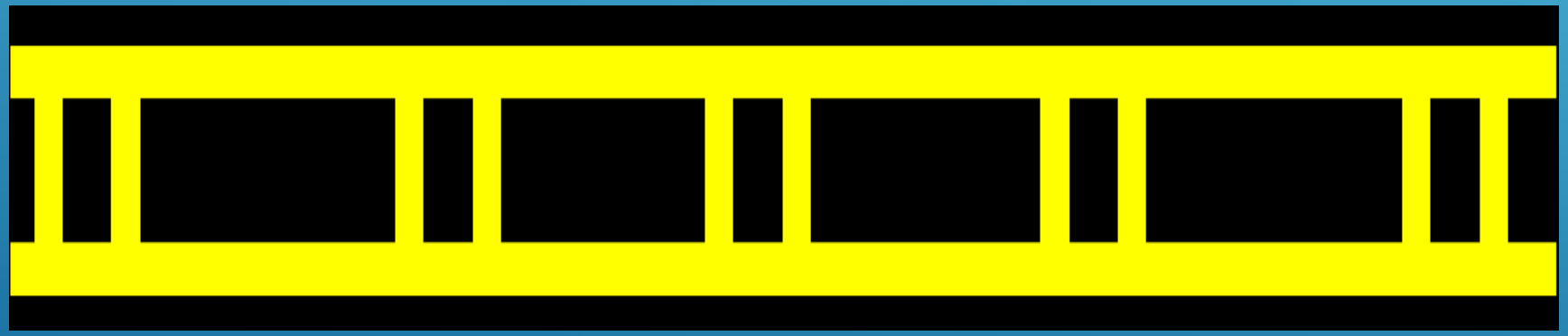


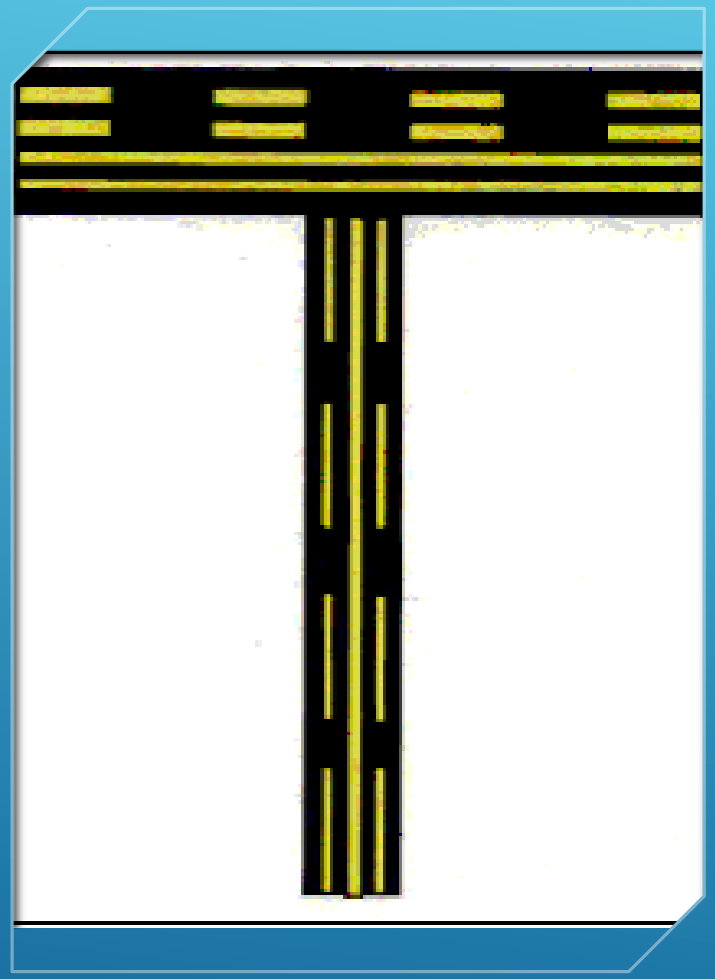
TAXIWAY DIRECTIONAL SIGNS

- Yellow background with black letters
- These signs indicate directions to a taxiway
- Remember "Yellow Array, Leads The Way"

ILS CRITICAL AREA HOLDING POSITION

- Instrument Landing System signs and markings indicate the critical area boundary
- Always hold short of this area when instructed to by ATC
- Located on TWY Delta & Echo for RWY 8
- Unauthorized penetration could interfere with navigational aids for landing aircraft





ENHANCED TAXIWAY CENTERLINES

- Dashed yellow line painted on each side of an existing taxiway line
- Extend 150’ from the hold short line
- Used to further alert vehicles and aircraft they are approaching the runway safety area
- Enhanced markings are supplemented by surface painted hold short signs

AIRFIELD LIGHTING

- Runway-edge and centerline lights are white (except for the last 2000’ of a runway which is identified with amber lights.) They are used to outline the edge of runways at night and during low visibility.
- Taxiway lights are blue and are used to outline the edge of taxiways at night and during low visibility.

AIRFIELD COMMUNICATION WHEN TOWER IS OPEN

- Tower operating hours (6am -11pm Everyday)
- Drivers needing access to the movement area must get authorization from ATC when open
- Two-Way Airband communication must be utilized for movement area access
- Vehicle must have flashing amber beacon for movement area
- Use vehicle identifier for communication (Alliance Fueler, Aerotech tug Etc.)
- Understand aviation phraseology and refrain from using “CB” lingo or law enforcement “ten” codes
- Think about what you are going to say before calling the tower.

LNS ATC FREQUENCIES / PHONE

Ground: 121.8

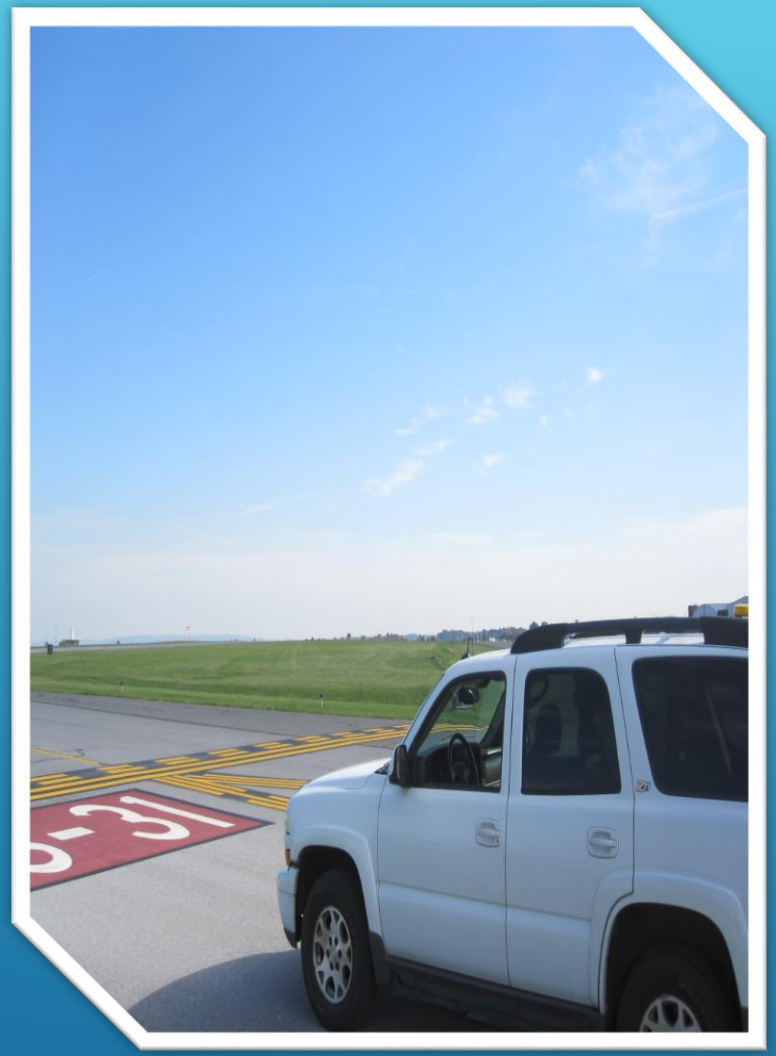
Tower:120.9

CTAF: 120.9

ATIS/ASOS: 125.675

PHONE: (717)-569-0004

WRITE THESE NUMBERS DOWN!!



- Prior to entering a movement area, communications must be established with the control tower on ground 121.8
- Do not proceed into the movement area until permission has been given by ATC
- Controllers are required to get an acknowledgement of “hold short” instructions. If Hold-Short instructions are given, you must acknowledge them by stating back the given instructions and compiling with the request.
- 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.

ATC Ground Vehicle Communication Example

- Driver: "*Lancaster Ground, Alpha Five*"
- ATC: "*Alpha Five, Lancaster Ground*"
- Driver: "*Alpha Five is on the west ramp and would like to cross runway 31 at Delta and proceed to Hotel*"
- ATC: "*Alpha Five, cross runway 31 on Delta and proceed to Hotel*"
- Driver: "*Alpha Five crossing runway 31 on Delta and will proceed to Hotel*

- After you are clear of the movement area always contact ATC and let them know your clear
- Driver "*Tower Alpha Five is clear of the field*"

ATC Ground Vehicle Communications

- Always read back full instructions given word for word
- Make sure you speak slowly and clearly
- When runway hold short instructions are given, the phrase “Hold Short” must be read back.
- If you do not understand instructions, ask the controller to repeat. NEVER ASSUME ANYTHING!

ATC Ground Vehicle Communications

- Be sure you understand aviation phraseology before driving on the airfield
- When instructions are given, understand your route, holding positions and stopping points
- If you are unsure of your driving route you may ask ATC for “Progressive” instructions which will give you turn-by-turn guidance

AIRFIELD LIGHT GUN SIGNALS

- Air Traffic Controllers have a back up system for communicating when radios and cell phones fail
- Light gun signals are used from the tower to alert and instruct pilots or vehicle drivers
- Failed radios and cell phones are never an excuse for proceeding without ATC clearance.
- Always have the ATC phone number with you while in the movement area: ***(717)-569-0004***

LIGHT GUN SIGNAL PROCEDURES FOR LOSS OF COMMUNICATION

Color and Type of Signal	Movement of Vehicles, Equipment and Personnel
Steady green	Cleared to cross, proceed or go
Flashing green	Not applicable
Steady red	Stop
Flashing red	Clear the taxiway/runway
Flashing white	Return to starting point on airport
Alternating red and green	Exercise extreme caution!!!!

1. Exit occupied runway or taxiway into adjacent grass if possible
2. Turn your vehicle towards the tower
3. Flash your headlights
4. Wait for controller to give you a light gun signal
5. Be patient! If the controller does not see you immediately, or has his attention elsewhere, it may take a few minutes
6. Follow light gun signal procedures
7. The controller may not know which route you plan on taking to exit, so they will stop all take offs and landings until you are clear.

AIRFIELD COMMUNICATION WHEN TOWER IS *CLOSED*

- Tower is closed between (11pm and 6am everyday)
- Driving is still permitted in movement area but different procedures must be followed
- Two-Way Airband communication must be utilized for movement area access
- Vehicle must have actively flashing amber beacon for movement area
- All communications must be on CTAF:120.9
- Airfield lighting is pilot controlled, and should be turned on by a pilot, if they are about to land
- Aircraft are supposed to announce their intentions and locations.
- Aircraft will always attempt to land and takeoff into the wind.

Closed Tower Communication Procedures

- Announce your intentions on the CTAF Freq: 120.9
- State who are, where you are, and what you intend to do.
- When approaching the movement area: STOP, LOOK, LISTEN for aircraft which are taking off, landing or taxiing
- Make location announcements every 15 minutes
- State your intentions each time you change location.
- ALWAYS YIELD TO ALL AIRCRAFT. THEY ALWAYS HAVE THE RIGHT OF WAY
- Be aware that aircraft could land or takeoff without announcing their intentions
- Aircraft will always attempt to land and takeoff into the wind
- If a pilot announces a final, or short final for a runway, he will be landing very soon.
- If the runway lights are on between 11:00pm and 6:00am that means someone turned them on. If the lights are off, it is a good indicator of a clear airport.

Closed Tower Communication Example:

Driver: Lancaster Traffic. Alpha Five will be driving down taxi-way Delta to area 10. Alpha Five will be crossing runway 31 Lancaster Traffic

Aircraft: Lancaster Traffic, This is N5429G on a five mile final for runway 26, Lancaster Traffic.

AVIATION PHONETICS

AVIATION/PILOT ALPHABET

A = **Alpha** (al fah)
B = **Bravo** (brah voh)
C = **Charlie** (char lee)
D = **Delta** (del tah)
E = **Echo** (eck oh)
F = **Foxtrot** (foks trot)
G = **Golf** (golf)
H = **Hotel** (ho tell)
I = **India** (in dee ah)
J = **Juliett** (joe lee ett)
K = **Kilo** (key loh)
L = **Lima** (lee mah)
M = **Mike** (mike)
N = **November** (no vem ber)
O = **Oscar** (oss cah)
P = **Papa** (pah pah)
Q = **Quebec** (qwa beck)
R = **Romeo** (row me oh)
S = **Sierra** (see air rah)
T = **Tango** (tang go)
U = **Uniform** (you nee form)
V = **Victor** (vik tor)
W = **Whiskey** (wis key)
X = **X-ray** (ecks ray)
Y = **Yankee** (yang kee)
Z = **Zulu** (zoo loo)

FOREIGN OBJECT DEBRIS (FOD)

- Any object on a runway or taxiway which is not supposed to be there is FOD.
- FOD is everyone's responsibility to clean up
- Ensure your vehicle is clear of mud before entering airfield
- Ensure nothing has the potential to fall off of your vehicle
- Trash, Mud, Screws, Etc., can get sucked into jet engines, or get caught in a prop, and cause serious damage
- Always pickup any trash and debris you see inside of the airport fence.
- Loss of property and human life can occur from FOD
- Alert Airport Ops immediately if a large amount of FOD is found and you do not have the capabilities to clean it up yourself.

SECURITY IDENTIFICATION DISPLAY AREA (SIDA)

- Located directly outside of the terminal on the airline ramp
- Designated with multiple signs
- SIDA Badges must be worn in the area at all times
- Access is restricted to persons with SIDA badges and airlines personnel only
- A non-badged individual found inside of the SIDA area must be immediately escorted out immediately
- If the Non individual is acting suspicious call airport personnel immediately.

PROCEED TO TEST