



# AVIATION SCIENCE SAFETY PROCEDURES AND PRACTICES

Per 14 CFR 141.93 (A) 3

Version 1.3: July 1, 2018

# SAFETY PROCEDURES & PRACTICES PER FAR 141.93 (A) 3

## 1. WEATHER MINIMUMS:

1. Dual (VFR) Local: 1500' ceiling, 3 miles visibility in controlled airspace.  
Max Wind: Not to exceed crosswind Component of the aircraft
2. Dual Cross Country: 3,000' ceiling, 3 miles visibility  
Max Wind: 15 knots, crosswind component: 10 knots
3. Solo (VFR) Local: 2,500' ceiling, 5 miles visibility  
Max Wind: 12 knots, crosswind component: 5 knots
4. Solo Cross Country: Forecast 5,000' ceiling, 5 miles visibility  
Max Wind: 12 knots, crosswind component: 5 knots
5. Night Flight: No students will be allowed to conduct solo night flights

## 2. STARTING PROCEDURES:

- A. A flight instructor will be in the airplane for all pre-solo starts.
- B. Brake pedals shall be firmly held during engine start.

## 3. TAXI PROCEDURES:

- A. Taxiing shall be **NO FASTER THAN A BRISK WALK**.
- B. DO NOT taxi with the brakes on. (*Feet should be on the rudders and off the brakes while taxi*)
- C. DO NOT try to maneuver through a tight area without an outside observer watching the wing tips. (*An observer shall watch the wing tips when taxiing through a tight area*)
- D. Observe correct position of controls with respect to wind.
- E. All taxiing shall be done on designated taxiways.

## 4. FIRE PRECAUTIONS and PROCEDURES:

### A. Airplane

1. Extreme care should be taken to avoid over-priming in cold weather.
2. Should a fire start, move mixture to idle cut off, open throttle, continue to turn engine over. If fire continues and time permits make an emergency radio call for help, otherwise, turn master off, close fuel valve, evacuate airplane, and get fire extinguisher.

## B. Building

In the event of a fire all students are expected to evacuate the building immediately and file into the parking area in an orderly manner. Fire extinguishers are positioned strategically about the ramp, hangar and office building.

## 5. RE-DISPATCH PROCEDURES:

A schedule of aircraft and instructors is provided for the orderly flow of student training. This schedule will be adhered to as closely as possible. Exceptions being allowed for changes in weather, flight conditions, or aircraft equipment failure which would affect flight safety. Should any student be forced to land at an airport due to engine trouble or weather, he/she is required to contact their flight instructor, each student will be provided with a contact number to the instructor on duty prior to all solo flights. An Aviation Science official will determine the course of action to be followed. Should the aircraft require repairs, none will be initiated without the consent of the Chief Instructor or his assistant. Should the aircraft stay at the unscheduled airport, the student/operator will ensure that it is securely tied down and chocked to prevent wind damage.

## 6. REPORTING AIRCRAFT DISCREPANCIES:

An aircraft discrepancy log is located in the aircraft folder. The discrepancy displays the dates and tach times of the discrepancy and when it was repaired. Current tach times on each aircraft will be updated daily. Discrepancies and Malfunctions of any system or part on the aircraft will be reported to your flight instructor for the purpose of entering discrepancies on the log; at which time the Instructors or Chief Instructor will forward the problem to maintenance. All non-airworthy or hazardous problems will ground the aircraft immediately for correction. Access to keys for grounded aircraft will be limited to authorized personnel of UMES only. Upon correction of all discrepancies, the aircraft will be signed back into service by maintenance personnel.

## 7. SECURING AIRCRAFT:

When not in use aircraft will be parked, the doors shut, control lock in place if installed. The aircraft will be hangered whenever possible or when the wind exceeds 15 knots and after the last flight of the day.

## 8. FUEL RESERVES:

### A. Local

1. No flight will be made unless the aircraft is at least one-half full of fuel before beginning the flight.
2. Plan on landing when gauges show one-fourth full or based on fuel consumption and time 1 hour reserve.

### B. Cross Country:

1. Flight will begin with full fuel unless authorized (visual confirmation).
2. Plan on having at least 1 hour of fuel upon landing.

3. Fuel stops will be incorporated on cross country flights.
4. Fuel purchases will be made with the aircraft specific Multi-Service Card if needed. It is the student's responsibility to obtain this card prior to departure! Fuel purchases made with other than aircraft cards are not allowed.

## 9. COLLISION AVOIDANCE:

While occupying a pilot's seat you will maintain surveillance of other aircraft on ground or in flight at all times. Clearing turns are mandatory prior to practice of flight maneuvers. Proper pattern entry and departures shall be practiced.

10. TRAINING AREAS: There are three (3) practice areas designated for UMES outlined in this manual. Descriptions are below and a map can be found on the next page

### **Training Area Alpha - Campus**

Extends from Rt.13 south of Fruitland, Maryland east along the SBY Class E surface to SBY 218 radial, then directly south to Rt. 13, west to the intersection of Rt. 13 and 413 then north along Rt. 13 to Princess Anne and returning north along Rt. 13 to Fruitland.

*Entry to Training Area Alpha:* Fly from SBY to the alpha gate, then due south to enter the training area.

*Return to Salisbury:* Exit the training area direct to alpha gate, then direct Salisbury remaining west of the Runway 23 extended centerline. Gate altitude 2800' AGL

### **Training Area Bravo - Pocomoke**

Extends from the SBY Class E surface airspace and SBY VOR 218 radial southeast to powerlines then south along the powerlines to the Pocomoke River then following the Pocomoke River west until it crosses Rt. 13 then north to the starting point.

*Entry to Training Area Alpha:* From SBY fly to Bravo gate then south towards Pocomoke enter training area.

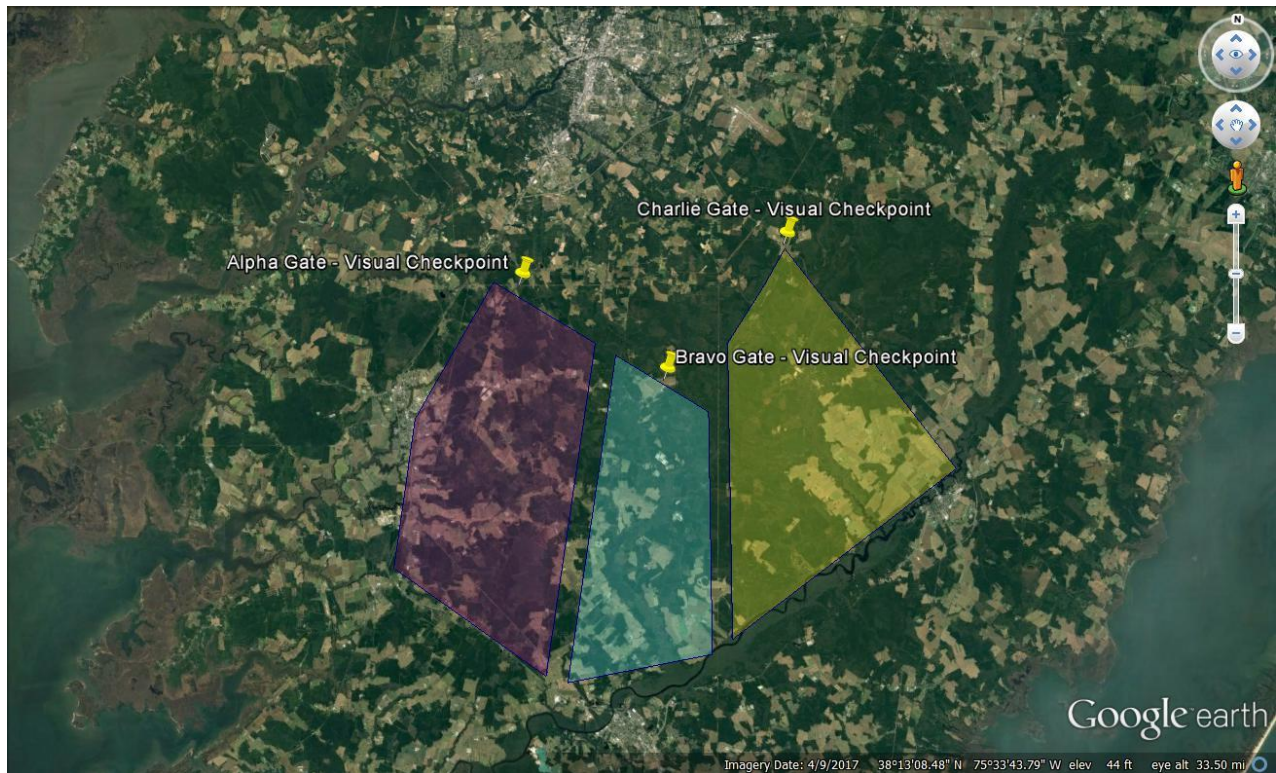
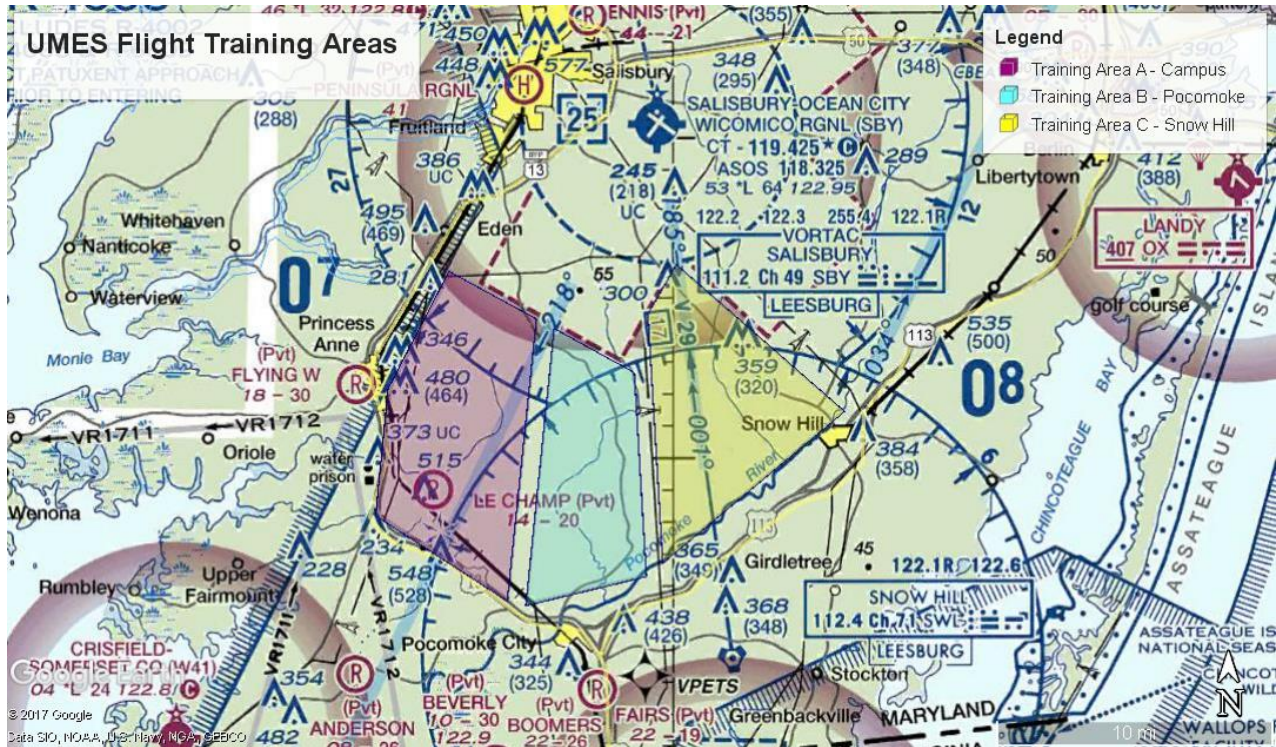
*Return to Salisbury:* Exit the training area by flying direct to the Bravo gate and then direct to SBY. Gate altitude 3300' AGL

### **Training Area Charlie - Snow Hill**

Extends from the intersection of the SBY Class D and SBY 185 radial along the surface Runway 32 Class E airspace southeast to the Town of Snow Hill, then southwest along the Pocomoke River to the powerlines then north along the powerlines to SBY Runway 23 class E surface then northeast to the original point.

*Entry to Training Area Alpha:* Fly to Charlie visual checkpoint from SBY, then fly south east towards the Snowhill area.

*Return to Salisbury:* Exit to visual checkpoint then direct SBY. Gate altitude 2300' AGL



## 11. MINIMUM ALTITUDE LIMITATIONS:

- A. Students shall execute clearing turns prior to each maneuver. Clearing turns may be 90 degree or a full 180 degree turn, starting with a left turn and then right turns from original heading. All students shall use the designated practice area for stalls and maneuvers. All maneuvers and stalls will be completed and recovered no lower than 1500' AGL except ground reference maneuvers and simulated emergencies.
- B. When practicing emergency landings the students shall recover no lower than 500' AGL. The engine shall be cleared once each 1000' while descending at best glide speed and power out **via throttle only**. Application of power should be idle to full power in two seconds minimum. Solo student pilots shall not practice emergency landings. During dual instruction, instructors will effect recovery from simulated emergency landings.

## 12. RUN-UP ADVISORY:

All students are to perform their run-ups short of the runway hold line and in designated area with the aircraft facing as nearly as possible into the wind. When making full stop landings and taxi back the pre take off check does not require a magneto check. A thorough check of oncoming traffic is to be made prior to taxiing onto the runway. A radio call on the appropriate frequency advising area traffic of your intentions or a takeoff clearance from the tower is required.

## 13. OFF-LIMITS:

For the protection and safety of the aircraft and pilots using them; the aircraft are off limits to spectators unless prior permission has been received from a UMES instructor and/or the Chief Instructor.

- A. Additionally, no student is to disclose any flight operational event, regardless of nature, to any person other than a UMES representative or Social Media without the permission of the Chief Instructor and/or Dean of the School of Business and Technology.

## 14. SMOKING POLICY:

Students and guests are prohibited from smoking in the operations building, hangars, ramp areas and shop areas due to the extensive use of flammable materials.

## 15. GENERAL SAFETY:

- A. No pilot in command shall leave an aircraft unattended while the engine is running.
- B. Avoid starting aircraft directly in front of the hangars, blowing debris could cause damage to other aircraft as well as injury to persons in the area.

## 16. DC Special Flight Rules Area / DC SFRA

All Instructors and students of UMES shall complete the FAA Learning Center Course; Navigating the DC SFRA, FRZ and Special Use Airspace

<https://www.faa.gov/gslac/ALC/CourseLanding.aspx?CID=405>). Students must also present to UMES instructors the training certificate to be posted in the students training folder. Student pilots shall not fly into or through the SFRA without an instructor on board. All students are required to carry a copy of their SFRA training certificate when flying.

#### 17. OTHER RULES:

- A. No student pilot may start a solo practice flight until the flight has been approved by an instructor who is present at the airport. FAR 141.79 (b)
- B. Pilots shall perform a pre-flight inspection
- C. No aircraft shall begin any flight with ice or frost on any aircraft surface.
- D. Use of checklist is mandatory for each flight
- E. Knowledge of the fuel system, fuel capacity, and fuel consumption of the aircraft is required by the pilot.
- F. Knowledge and compliance with all FAA Air Traffic Rules is mandatory.
- G. If you cannot meet a scheduled appointment call ahead, even if weather is bad.
- H. A Pre-takeoff Checklist, Pre-landing Checklist, and Operator's handbook must be on board for all flights (FAR 141.75.)

#### 18. Safety Management System (SMS)

- A. All student pilots are required to participate in the UMES Aviation SMS program

#### 19. Normal Flight Procedures Document

A. A Normal Flight Procedures Document has been created for student guidance. These procedures should be followed except when they are in conflict with the Safety Procedures and Practices outlined above or Federal Aviation Regulations. The Normal Procedures Document can be found in the Aviation Science Pilot Handbook.

#### 20. Drug Policy

A. The UMES Drug Policy for Aviation Staff, Students and Instructors is in full effect as of July 1, 2018. Please consult this policy for more information. A copy of the Drug Policy can be found in the Aviation Science Pilot Handbook.

**Change log:**

**Version 1.1, September 8, 2017:** Original

**Version 1.2, change date September 28, 2017:** Adds Visual checkpoints to training areas and revises entry and exit procedures. Adds Google map of training areas.

**Version 1.3, July 2018:** Adds paragraphs 19 and 20 mentioning of Normal Procedures and Drug Policy Documents. Changes the word “company” to “Aviation Science” in paragraph 5.