



## **Eastern Michigan University Aviation: Safety Management System Overview**

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## **Eastern Michigan University Safety Management System:**

### **Introduction:**

EMU has started a new safety management system in conjunction with Crosswinds Aviation that is based on anonymous safety reporting done through an online form that is linked on both our website along with a QR code that is placed at every Crosswinds Location.

We use the 4 Pillars of SMS as the basis of our SMS system and constantly evaluate our system based around the pillars.

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## **Contact Us**

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If you have any safety concerns, please fill [EMU Aviation Anonymous Safety Reporting Form](#) →

### **Our 4 Pillars of SMS:**

#### **1. Safety Policy:**

EMU Aviation is constantly looking for ways to improve our safety system and safety measures at each of our locations. The Flight and Safety Coordinator is responsible for using student and staff input along with observations to make continual updates and improvements to our safety management system.

## **2. Safety Risk Management:**

The Flight and Safety Coordinator is responsible for managing all risks and reports received from any of our locations. This is all done through our new SMS system, outlined below:

### **Safety Reporting Form:**

We have an online anonymous safety reporting form where students will be able to report any concerns that they have with any of our locations (Crosswinds Aviation locations or Main EMU Campus). Reports are submitted anonymously and are sent to Flight Safety Coordinator, Aviation Program Coordinator, Director of The School of Technology and Professional Services Management, and EMU Safety Officials.

All form responses will be entered and stored in our Safety Management System and will be used to help improve our program for our students. All responses/concerns will also be assigned a risk number to help evaluate it on the risk assessment matrix used by the FAA in Advisory Circular 120-92B.

Link to the safety reporting form (link has been shortened for your convenience):

<https://bit.ly/3odwk7O>

### **Safety Management System:**

Eastern Michigan University is using Flight School SMS to manage our safety management. All anonymous reporting form results are stored in Flight School SMS and a risk matrix is generated.

This will help us keep track and history of our reports and will allow us to collect more details than the standard reporting form. We will also be able to keep track of our findings and actions taken by EMU and Crosswinds Aviation.

### **Maintenance:**


Maintenance for aircraft is handled by Crosswinds Aviation. All aircraft maintenance is tracked in Flight Schedule Pro along with all aircraft documents and supplements. Flight Schedule Pro also tracks all required inspections and ADs for an aircraft based on the current Tach and Hobbs time of the aircraft and will self ground the plane if maintenance is due. Maintenance personnel are emailed when an aircraft is approaching maintenance intervals.

Addendum A and B Included below list Crosswinds Aviation Maintenance policies and Return to Service Procedures.

Below is an example of an aircraft maintenance status window from Flight Schedule Pro:

## Maintenance Status

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N123TV Diamond DA40 Diamond Star

Aircraft Times
Description
Equipment
Specs

Meters (Current)

Hobbs **3,309.2**

Engine 1 Tach **2,467.7**

Next Maintenance Due

Date ✔ **105 day(s)**

Hours ⚠ **4.3 hour(s) Expired**

▼ Maintenance Times

|                                     |      |         |
|-------------------------------------|------|---------|
| Airframe (follows Engine 1 Tach)    | TTIS | 2,467.7 |
| Engine 1 (follows Engine 1 Tach)    | TTIS | 2,467.7 |
| Propeller 1 (follows Engine 1 Tach) | TTIS | 2,467.7 |
|                                     | TSOH | 2,467.7 |

| Squawks |                                  |                          | Status         |
|---------|----------------------------------|--------------------------|----------------|
|         |                                  |                          | Open Squawks ▼ |
| Created | Squawk                           | Status                   |                |
| 5/12/23 | Nose gear tire tread about done. | Awaiting Review          |                |
| 5/8/23  | Map range knob is falling off    | Verified, Awaiting parts |                |

| Maintenance Reminders |  |                 |                      |                  | Status                |
|-----------------------|--|-----------------|----------------------|------------------|-----------------------|
|                       |  |                 |                      |                  | All Active Statuses ▼ |
| Status                | Template Name  | Days Remaining  | Hours Remaining      | Cycles Remaining |                       |
| ⚠                     | 50-Hour Inspection / Oil Change (can be overflow)      | --              | 4.30 Hours Expired   | --               |                       |
| ✔                     | 100-Hour Inspection                                    | --              | Due in 45.70 hours   | --               |                       |
| ✔                     | AD 2015-19-07 Fuel Injection System                    | --              | Due in 55.70 hours   | --               |                       |
| ✔                     | AD 93-05-06 ACS Ignition Switch - 2000 Hour Inspection | --              | Due in 1519.10 hours | --               |                       |
| ✔                     | Annual Inspection                                      | Due in 196 days | --                   | --               |                       |

### 3. Safety Assurance

The Flight and Safety Coordinator will conduct safety inspections of each of our locations to ensure proper safety compliance. This will help ensure a proper safety culture at each location as well as help improve our SMS system if any issues are found.

The Flight and Safety coordinator will also consistently monitor risks or hazards that are observed or reported to assure they are being properly addressed.

### 4. Safety Promotion

The biggest promotion of safety is done through lessons with students and posters at each of our locations that promote safety.

Our safety reporting form is also a promotion of safety as students will be able to report safety concerns anonymously if they wish. We have posters hung up at all locations with information about the form:

#### Safety Reporting System at Each Location:

We have asked each Crosswinds Location to post the Safety Reporting Form flyer at each of their locations. Examples are below:

#### Pontiac:



#### Flint Location:



## Howell Location:



## Ypsilanti Location:



## Safety in Place at Each Crosswinds Location:

### Door Locks:

All location doors are secured with a lock. PTK, OZW and YIP have numeric locks required to enter the premises and airport property. FNT has a card scanner where students need to scan their airport ID card to enter the premises.



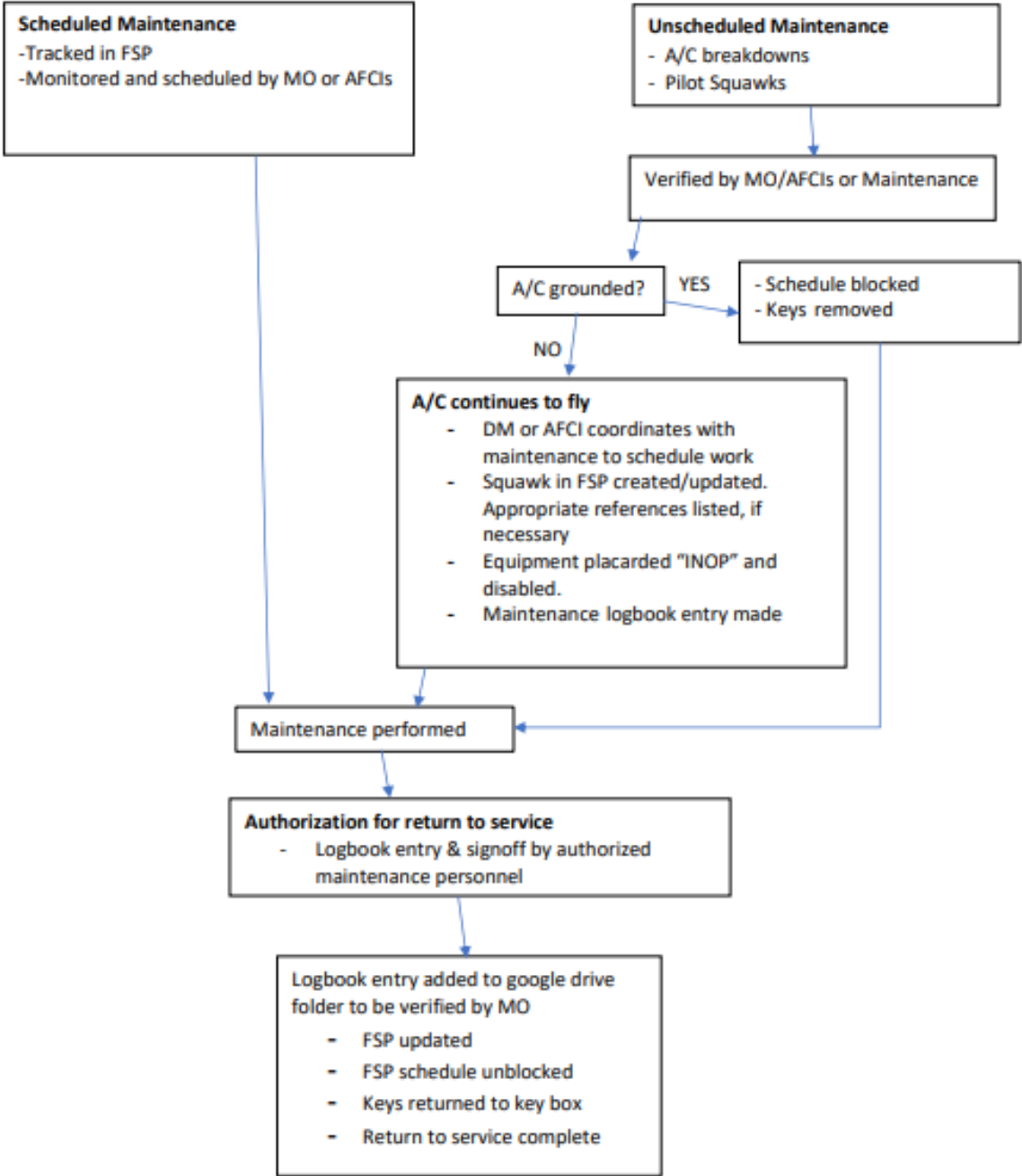
Eastern's main campus has card swipes to access each building that only faculty have access to. Each classroom door has a keypad which only faculty know the combinations to.

## Aircraft Keys:

Aircraft keys are secured in key lockboxes and combinations are only given to instructors and active students. Students must leave their car keys in the lockbox prior to taking an aircraft key to remember to put the aircraft keys back on entry. This ensures that aircraft are not left on the ramp with keys, and students don't accidentally take aircraft keys home with them. Key backups are securely stored with no student access.



### Maintenance Procedure Flow Chart





### Crosswinds/Maintenance Return to Service Procedures

