UAS FLIGHT AUTHORIZATION APPLICATION PROCESS

JESSICA FLORES, RISK & COMPLIANCE COORDINATOR

OVERVIEW

- SYSTEM REGULATION REQUIREMENTS
- AGENCY APPROVAL PROCESS
- TAMUS UAS FLIGHT AUTHORIZATION APPLICATION

SYSTEM REGULATION REQUIREMENTS

- REGISTER UAS WITH FAA
- REQUIRE ALL OPERATORS TO HAVE A CONTINGENCY MANAGEMENT AND MISHAP RESPONSE PLAN THAT INCLUDES
  - LOSS OF CONTROL OR CONNECTION TO UNMANNED AIRCRAFT, INCLUDING LOSS OF CONTROL LINK, LOSS OF GPS AND LOSS OF POWER
  - ACTIONS ON SIGHTING OF A PILOTED AIRCRAFT
  - ACTIONS UPON A CRASH OF UNMANNED AIRCRAFT
- PLACE UAS ON INVENTORY REGARDLESS OF DOLLAR AMOUNT
- PROVIDE MAINTENACE RECORDS
- RECEIVE APPROVAL FROM CEO OR DESIGNEE BEFORE FILLING FOR PUBLIC COA OR PART 107 COW
- REQUIRE OPERATORS WHO FLY OVER MEMBER PROPERTY TO NOTIFY THE MEMBER'S RESPECTIVE POLICE DEPARTMENT

REFER TO SYSTEM REGULATION 24.01.07.2.3

TEXAS A&M AGRILIFE RESEARCH

TEXAS A&M AGRILIFE EXTENSION

UAS Approval Process

Texas A&M AgriLife-Off Campus

Research, Extension & TVMDL

Texas A&M AgriLife has established a Supervising Authority to review and approve UAS flights that occur by employees outside of Brazos County excluding the Brazos Bottom Farm. This approval process applies to agency employees, vendors, visitors and students operating UAS on any property owned or leased by the agency, or employees operating UAS on property not owned or leased by the agency as part of their employment.

There are three ways to fly UAS at Texas A&M AgriLife Research, Extension or TVMDL facilities:

1. In accordance with an FAA-issued Public COA.
2. In accordance with FAA Part 107 rules.
3. For educational purposes

TEXAS A&M AGRILIFE RESEARCH

TEXAS A&M AGRILIFE EXTENSION

Hobbyists are not allowed to fly UAS on Texas A&M AgriLife Research, Extension or TVMDL property.

(Exemptions for educational or demonstration purposes upon request may be granted)

To fly UAS in accordance with an FAA-issued Public COA or in accordance with FAA Part 107 rules:

1. Submit your application to the Texas A&M AgriLife Supervising Authority through the following link: https://www.tamus.edu/business/risk-management/uas/uas-application/. Applications should be submitted a minimum of 15 business days before desired flight.

2. Attach all requested documentation to ensure delays are avoided.

3. Completed on-line applications will be reviewed by the Supervising Authority; any questions will be directed to the individual who completed the application.

4. The Supervising Authority reserves the right to cancel or re-schedule any approved UAS usage, if doing so is in the best interest of the agency. Note: If an accident occurs during flight, the remote pilot in command (RPIC) is responsible for submitting an accident report to the Texas A&M AgriLife Supervising Authority within 48 hours. This report will be retained with the original application and associated documents.

To fly a UAS for educational/demonstration purposes:

1. Submit the following information to Risk and Compliance through email at uas@ag.tamu.edu:
    a. Name of Center or Department
    b. Name and contact information of AgriLife employee responsible for the demonstration or educational lesson
    c. Description of UAS to be flown
    d. Registration number of UAS to be flown
    e. Area requested for flight
    f. Description of activities related to UAS flight. Note that educational/demonstration use of UAS only allows the visitors to fly the UAS; employee's role must be incidental and secondary to the visitor's (e.g., regain control in the event the visitor begins to lose control, terminate the flight, etc.)

Summary of Responsibilities.

1. The Remote Pilot in Command (RPIC) is responsible for all components associated with safe flight of the UAS and compliance with applicable FAA rules and regulations.

2. Damage. The applicant granted approval for use is responsible for any damage resulting from the use of UAS on AgriLife property. If the applicant is an AgriLife employee/department, using a third-party contractor to operate UAS, liability for damage must be otherwise assigned contractually to this third party. See insurance requirements below.

3. Accident. The RPIC must submit an Accident Report to the Supervising Authority within 48 hours of any accident that occurs during an approved flight.

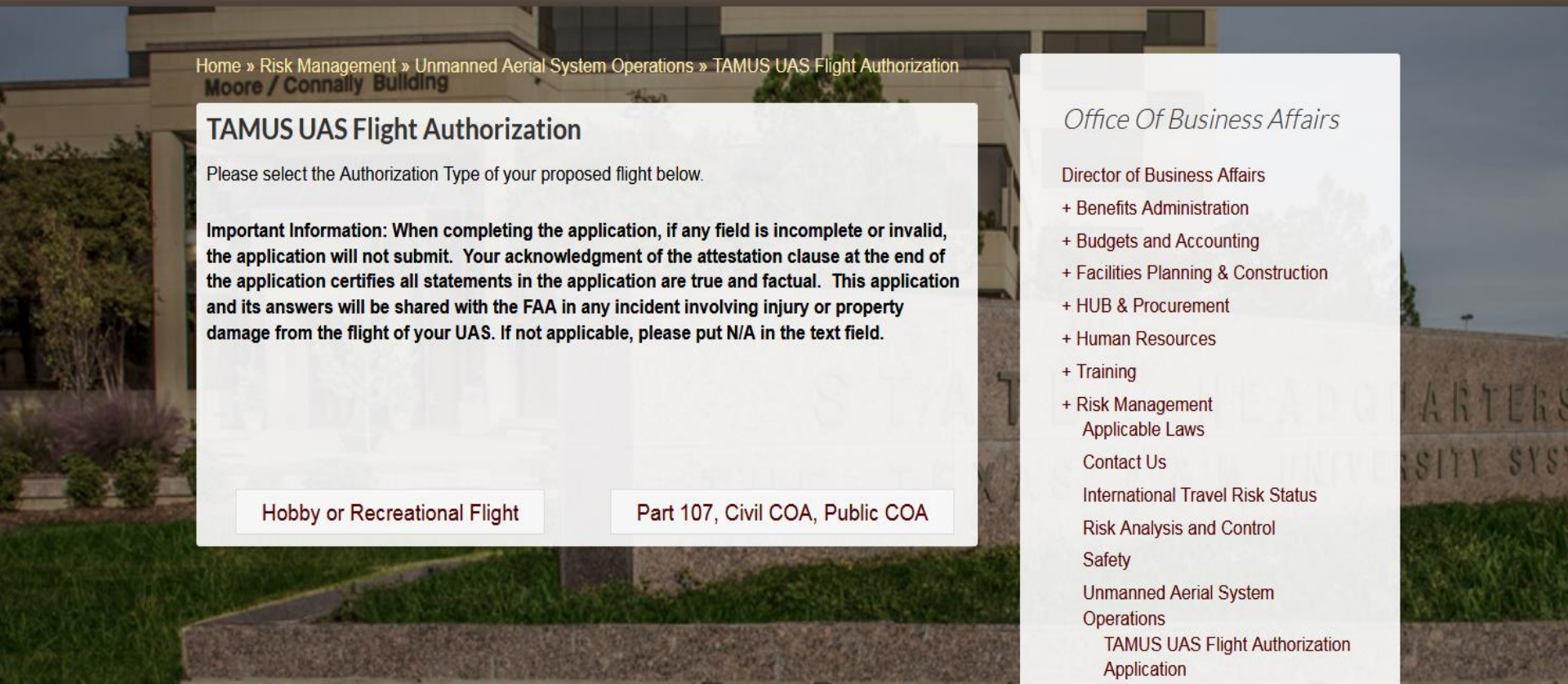
Summary of Requirements:

1. Insurance. The insurance requirements associated with use of UAS on AgriLife property will be determined by University Risk Management, in consultation with A&M System Risk Management.

For insurance requirements refer to System Regulation 24.01.07.3.6

2. Registration. All AgriLife-owned or acquired UAS must be properly registered in accordance with FAA requirements. Use the FAA's Web site to register UAS: https://registermyuas.faa.gov/. Additionally, all UAS must be placed on inventory and have an asset number assigned.

For definitions related to the UAS Program, refer to System Regulation 24.01.07.



TAMUS UAS Flight Authorization

Please select the Authorization Type of your proposed flight below.

Important Information: When completing the application, if any field is incomplete or invalid, the application will not submit. Your acknowledgment of the attestation clause at the end of the application certifies all statements in the application are true and factual. This application and its answers will be shared with the FAA in any incident involving injury or property damage from the flight of your UAS. If not applicable, please put N/A in the text field.

Hobby or Recreational Flight

Part 107, Civil COA, Public COA

Office Of Business Affairs

Director of Business Affairs
+ Benefits Administration
+ Budgets and Accounting
+ Facilities Planning & Construction
+ HUB & Procurement
+ Human Resources
+ Training
+ Risk Management
  - Applicable Laws
  - Contact Us
  - International Travel Risk Status
  - Risk Analysis and Control
  - Safety
  - Unmanned Aerial System Operations
    - TAMUS UAS Flight Authorization Application

TAMUS UAS Flight Authorization Application

This form is to approve the flying of UAS devices on or off campus by System employees, faculty and students as well as any outside party flying on the property of TAMUS and its members.

Pilot Name/Company *

Jessica Flores

Pilot Phone *

(979) 862-2689

Pilot Email *

jessica.flores@ag.tamu.edu

System Member/Supervising Authority? *

Please identify to which member location you are sending your application.

Texas A&M AgriLife Research

UAS rPIC Pilot Certification Number *

1234567

Name and Certificate Number of Additional remote Pilots

Misty Miles — Full Name

8912345 — Certificate Number

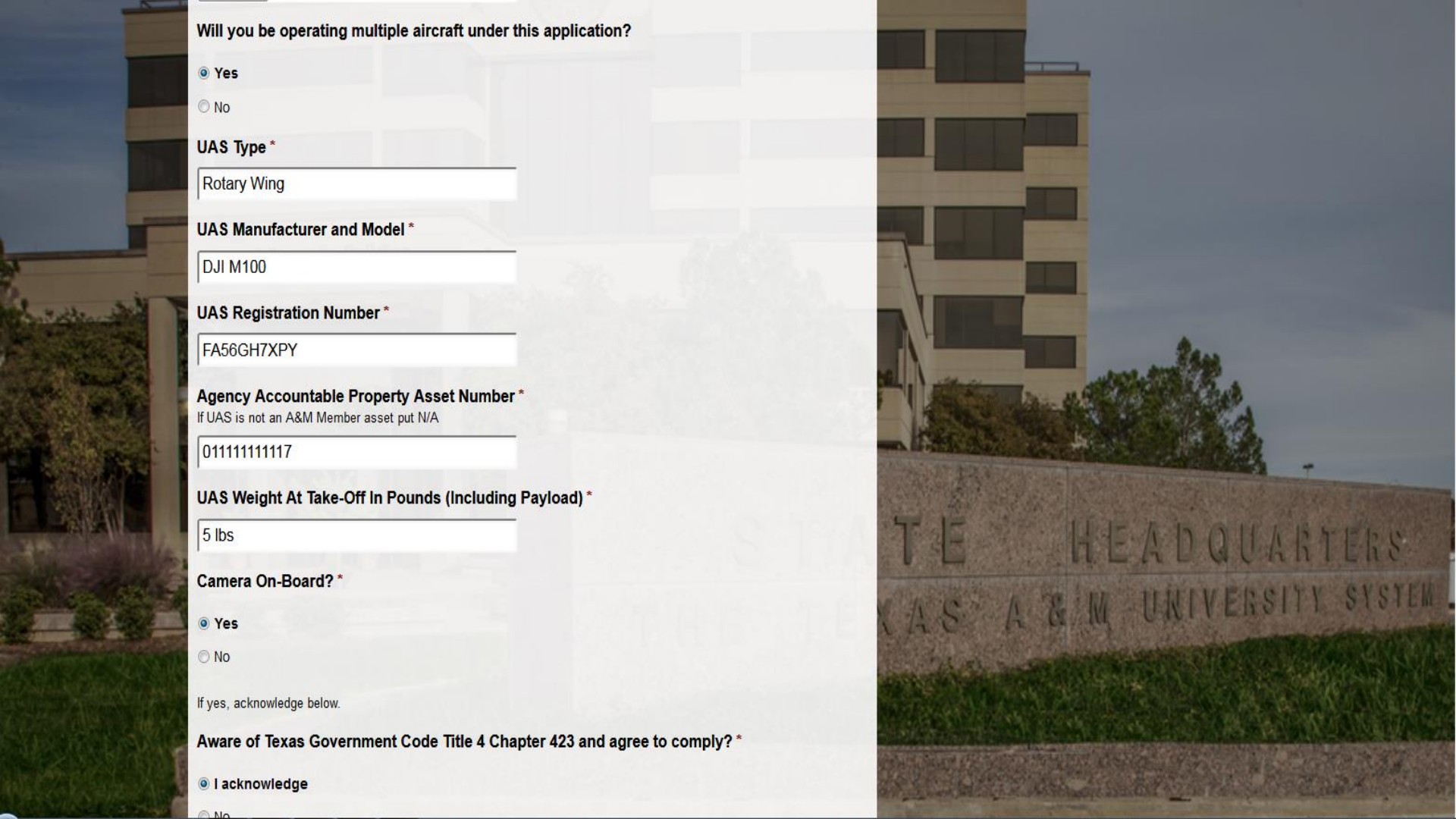
Name and Certificate Number of Additional remote Pilots

Full Name

Certificate Number

Upload all UAS Pilot Certificates

Browse... No file selected. Accepted file types: jpg, gif, png, pdf, word.



Will you be operating multiple aircraft under this application?

- (•) **Yes**
- ( ) No

UAS Type *

Rotary Wing

UAS Manufacturer and Model *

DJI M100

UAS Registration Number *

FA56GH7XPY

Agency Accountable Property Asset Number *

If UAS is not an A&M Member asset put N/A

011111111117

UAS Weight At Take-Off In Pounds (Including Payload) *

5 lbs

Camera On-Board? *

- (•) **Yes**
- ( ) No

If yes, acknowledge below.

Aware of Texas Government Code Title 4 Chapter 423 and agree to comply? *

- (•) **I acknowledge**
- ( ) No

Flight Authorization Type *

Part 107 Flight

Category of Flying *

Employee Research

Purpose of Flight

Collect imagery data for the wheat breeding program.

Beginning Date of Flight *

01/09/2018

End Date of Flight *

01/23/2018

Start Time of Flight *

9 0 AM

HH : MM

End Time of Flight *

5 0 AM

HH : MM

Location/Description of Proposed Flight area: *

The flights will be conducted at the Brazos Bottom Farm.

Latitude and Longitude *

Please add 4 corner points and pilot's location.

Corner 1:30.539215, -96.425468
Corner 2:30.540425, -96.424432
Corner 3:30.540067, -96.423975
Corner 4:30.539167, -96.425081
Pilot's Location: 30.539183, -96.425561

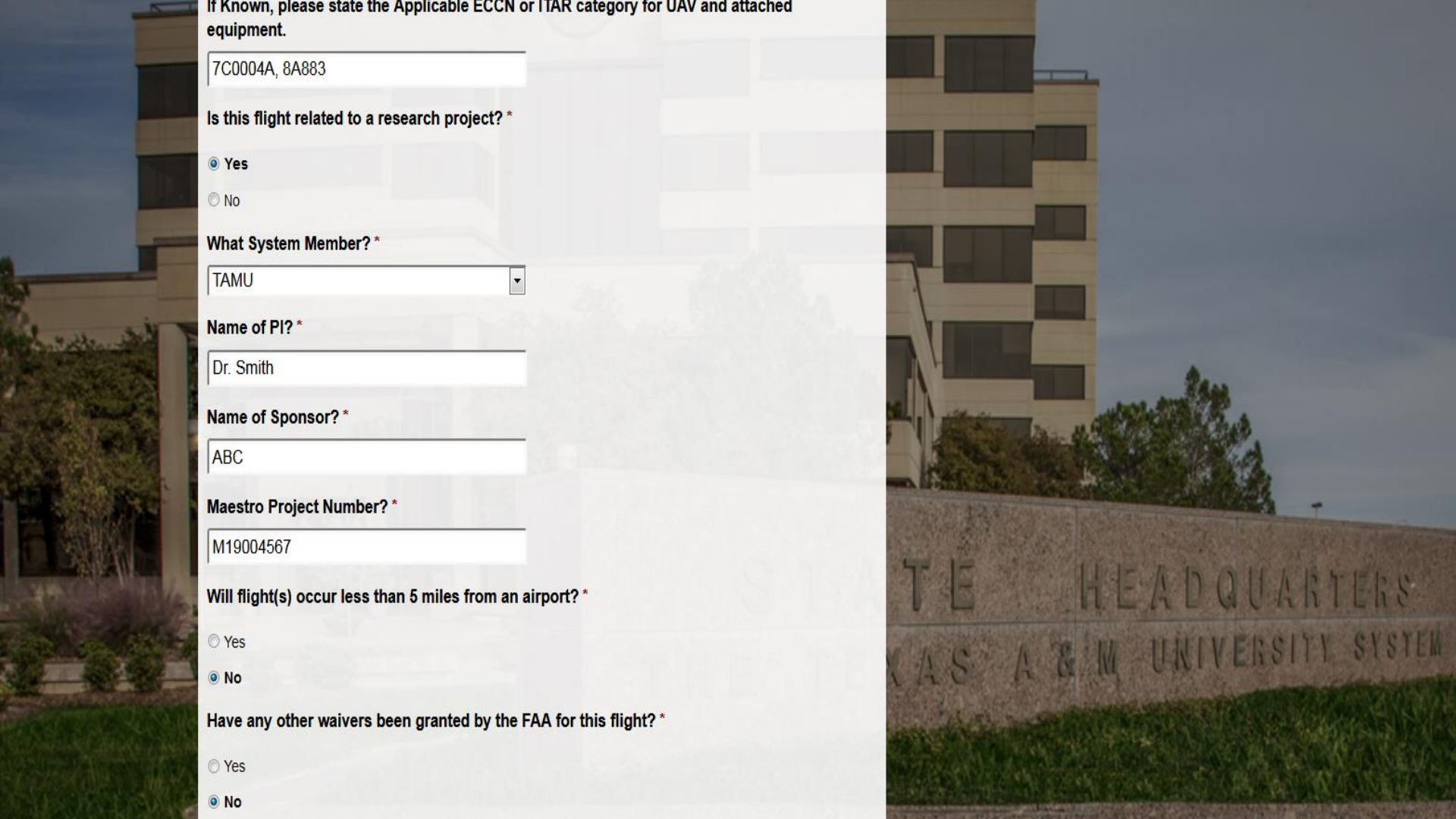
Will this flight occur overseas? *

- ○ Yes
- ◉ **No**
- ○ NA

Export Controlled Flight? *

- ◉ **Known**
- ○ Unknown
- ○ NA

If Known, please state the Applicable ECCN or ITAR category for UAV and attached equipment.



If Known, please state the Applicable ECCN or ITAR category for UAV and attached equipment.

7C0004A, 8A883

Is this flight related to a research project? *

- (•) **Yes**
- ( ) No

What System Member? *

TAMU

Name of PI? *

Dr. Smith

Name of Sponsor? *

ABC

Maestro Project Number? *

M19004567

Will flight(s) occur less than 5 miles from an airport? *

- ( ) Yes
- (•) **No**

Have any other waivers been granted by the FAA for this flight? *

- ( ) Yes
- (•) **No**

Will pilot-in-command give way to manned aircraft? *

- (•) **Yes**
- ( ) No

Does the aircraft weigh more than 55 lbs? *

- ( ) Yes
- (•) **No**

Do you have aviation liability insurance? *

- (•) **Yes**
- ( ) No

What are the limits of the aviation liability insurance? *

The Supervising Authority will determine if adequate.

None

Will you be operating before dawn or past twilight as defined by the FAA? *

FAA Exemption is required to operate before dawn or past twilight.

- ( ) Yes
- (•) **No**

Do you have maintenance records for the aircraft? *

- (•) **Yes**
- ( ) No

Please upload maintenance records.

Drop files here or

SELECT FILES

Will you be operating from a moving vehicle? *

FAA Exemption is required to operate from a moving vehicle.

- ○ Yes
- ◉ **No**

Does the pilot have Remote Pilot Certificate? *

- ◉ **Yes**
- ○ No

Part 107 Flight Validation

Have you reviewed an aviation map for this flight? *

FAA requires all pilots to review an aviation map of the area for which you are flying a UAS device.

- ◉ **Yes**
- ○ No

Please select the Class of Airspace. *

Airspace class may require FAA Exemption.

G

Are there any flight restrictions in this airspace? *

- ○ Yes
- ◉ **No**

Is the operator flying within visual line of sight?

- ◉ **Yes**
- ○ No

Acknowledgement and Signature

Acknowledgement *

I understand as the remote pilot-in-command (PIC) of a UAS, I am directly responsible for, and have final authority as to, the operation of the UAS. I further understand that as the remote PIC, I also have ultimate responsibility for the safe operation of the UAS flight(s) I am requesting approval to conduct. The information I have provided in my application is true and accurate.

☑ **I accept and acknowledge the accuracy of my application.**

Electronic Signature *

Jessica Flores

Date *

12/12/2018

Address *

600 John Kimbrough Blvd

Street Address

Address Line 2

City

State / Province / Region

College Station

ZIP / Postal Code

United States

Country

Phone *

(979) 862-2689

Email *

jessica.flores@ag.tamu.edu

Website

http://

If verbal approval was provided by the FAA, please provide your FAA contact.

Name:
Phone:
Email:

Required Document(s) Upload: Emergency Plans; Accident History; Signed Liability Release

Drop files here or

SELECT FILES

Accepted file types: jpg, gif, png, pdf, doc, docx.

SUBMIT Save and Continue Later

SUPPORTING DOCUMENTS

- FAA PART 107 PILOT LICENSE
- FAA UAV REGISTRATION
- CONTINGENCY MANGEMENT & MISHAP REPONSE PLAN
- REPORTABLE ACCIDENT
- SYSTEM RISK MATRIX
- MAINTENANCE RECORDS

I UNITED STATES OF AMERICA XI

DEPARTMENT OF TRANSPORTATION ▪ FEDERAL AVIATION ADMINISTRATION

IV NAME

XXXXXXXXXXXXX

V ADDRESS XXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXX

U

VI NATIONALITY USA	SEX	HEIGHT	WEIGHT	HAIR	EYES
IVa D.O.B. XXXXXXXXX	X	XX	XXX	XXXXX	XXXXX

A

IX HAS BEEN FOUND TO BE PROPERLY QUALIFIED TO EXERCISE THE PRIVILEGES OF

II REMOTE PILOT

III CERTIFICATE NUMBER XXXXXXXX

X DATE OF ISSUE XXXXXXXX

S

XIV

VIII ADMINISTRATOR

Federal Aviation Administration

Small UAS Certificate of Registration

CERTIFICATE HOLDER:

UAS CERTIFICATE NUMBER:

ISSUED: **12/21/2015** EXPIRES: **12/21/2018**

For U.S. citizens, permanent residents, and certain non-citizen U.S. corporations, this document constitutes a Certificate of Registration. For all others, this document represents a recognition of ownership.

For all holders, for all operations other than as a model aircraft under sec. 336 of Pub. L. 112-95, additional safety authority from FAA and economic authority from DOT may be required.

Safety guidelines for flying your unmanned aircraft:

- Fly below 400 feet
- Never fly near other aircraft
- Keep your UAS within visual line of sight
- Keep away from emergency responders
- Never fly over stadiums, sports events or groups of people
- Never fly under the influence of drugs or alcohol
- Never fly within 5 miles of an airport without first contacting air traffic control and airport authorities

CONTINGENCY MANAGEMENT & MISHAP RESPONSE PLAN

- **LOSS OF CONTROL OR CONNCECTION TO THE UNMANNED AIRCRAFT, INCLUDING LOSS OF CONTROL LINK, LOSS OF GPS AND LOSS OF POWER**
  - CONTACT AIR TRAFFIC CONTROL AND NOTIFY AREA PILOTS THAT MAY ENCOUNTER THE UAS. FOLLOW UAS AT SAFE DISTANCE TO RETRIEVE IT.
- **ACTIONS ON SIGHTING OF A PILOTED AIRCRAFT**
  - ABORT THE MISSION, IMMEDITAELY TAKE MANUAL CONTROL OVER THE UAS AND BRING IT TO THE GROUND IN A CONTROLLED MANNER.
- **ACTIONS UPON A CRASH OF THE UNMANNED AIRCRAFT**
  - DETERMINE ANY DAMAGE TO UAS, PERSONNEL AND PROPERTY. IF ABOVE $500 CONTACT FAA AND AGRILIFE SUPERVISING AUTHORITY.

REPORTABLE ACCIDENT REPORT

12/11/18

I certify that as of 11 December 2018 we have not had any FAA-reportable accidents with our DJI M100 rotary wing (FAA # FA56GH7XPY) under Part 107 small UAS regulations.

Jessica Flores
979-862-2689
Jessica.flores@ag.tamu.edu

The Texas A&M University System Risk Management and Insurance Matrix

Exposure To Be Reviewed: weekly RGB and multispectral imagey of wheat breeding nurseries

Instructions: **Step 1**-List all event activities and be as inclusive as possible. **Step 2**-Completey identify risks associated with each activity. **Step 3**- Use the matrix below to assess your activities. Tally the seriousness and probability scores for evaluation . **Step 4**- Brainstorm methods to manage risks. Reduce the probability of something going wrong. **Step 5**- Submit Risk Management and Insurance Matrix Form with a Risk Assessment Form to System Risk Management for further review by email to RMS-Insurance@tamu.edu or by faxing to 979-458-6247.

*Please feel free to contact System Risk Management 979-458-6330 for assistance in the risk assessment process and completion of this tool

List of Activities To Occur	Associated Risks*	Seriousness	Probability	Method to Manage Risks**
UAV flight	Injury	3	D	Stay away from UAV
UAV flight	Aircraft incursion	2	D	Notify Hereford Municipal Airport; s
UAV flight	Cut	3	D	Stay away from UAV
UAV flight	Scrape or bruise	4	D	Stay away from UAV
Driving to site	Collision	3	D	Drive safely, check blind spots

* Possible risks include: medical emergencies, food poisoning/allergic reactions, damage to member reputation, accidents, injuries, and/or death

**Methods to manage risk may include: arranging for security, traveling with an advisor, rotating drivers, proper facility inspections, waiver forms etc

Seriousness

1- May Result in Death

2- May cause severe injury, major property damage, significant financial loss, and/or result in negative publicity for the member institution or group.

3- May cause minor injury, illness, property damage, financial loss and/or result in negative publicity for the member institution or group

4- Hazard presents a minimal threat to safety, health and well-being of participants

	Probability			
Seriousness	A	B	C	D
I				
II				
III				
IV				

If any activity score is within the red or yellow, System Risk Management highly recommends you forward the Matrix to their attention for further discussion. Although insurance procurement may not be the answer, discussions should occur regarding self-retention so all parties are aware of the risks associated with the activity.

Probability

A- Likely to occur immediately or in a short period of time; expected to occur frequently

B- Probably will come in time. With enough time and activity; it is likely to occur over the life of the event

C- May occur in time. Probability of occurrence is lower and there is an equal chance of it occurring vs. not.

D- Unlikely to occur at any point during the event

Form Updated 01/14/2016

THIRD PARTY VENDOR, CONTRACTOR OR HOBBYIST REQUIREMENTS

- PROOF OF INSURANCE
- LIABILTY WAIVER
- CONTRACT

AVIATION LIABILTY INSURANCE

GLOBAL AEROSPACE

APPLICATION FOR
HULL AND LIABILITY INSURANCE
UNMANNED AIRCRAFT SYSTEMS
OPERATING LINE OF SIGHT AND BELOW 400 FEET ALTITUDE

CHECK WHICH IS DESIRED: ☐ NEW INSURANCE POLICY ☐ RENEWAL POLICY
NAME OF APPLICANT (Including D/B/A's And Holding Companies):
ADDRESS:
BUSINESS OR OCCUPATION OF APPLICANT:
COMPANY WEBSITE:
APPLICANT IS: ☐ INDIVIDUAL(S) ☐ CORPORATION ☐ LLC ☐ PARTNERSHIP ☐ PUBLIC ENTITY ☐ OTHER
INSURANCE IS REQUESTED FROM 12:01 A.M . TO 12:01 A.M. (local time at address of applicant)

Liability Coverage

LIMITS OF INSURANCE	EACH OCCURRENCE LIMIT
Single Limit Bodily Injury and Property Damage Liability:	$
Other Liability – Please state:	$

Physical Damage Coverage

UAS Year, Make and Model	New / Used	UAS Registration/ Serial Number	UAS Insured Value	Location usually stored	Estimated annual flight hours	Is War Risk Coverage required?
	☐ new ☐ used		$			☐ Yes ☐ No
	☐ new ☐ used		$			☐ Yes ☐ No

Operations

Geographic area(s) of operation (please list):	Maximum altitude you intend to operate:
Will the UAS operate under an FAA Section 333 exemption? ☐ Yes ☐ No	Will the UAS operate under an FAA approved COA? ☐ Yes ☐ No
Operating Environment (Please list the percentage next to each. Should total 100%): Urban Semi-Urban Industrial Rural Over Water Over Desert	
Operating Entity: ☐ Civil ☐ Government ☐ Military (non-combat)	Flight Conditions: ☐ Night ☐ IFR ☐ Low Level
Describe all intended uses of the UAS?	
Any operations over public or private events? ☐ Yes ☐ No If "Yes," please describe.	
Do you utilize a Standard Operating Procedure manual? ☐ Yes ☐ No	

List all pilots who operate the applicant's UAS, both employed and contract:

Name	Hours Flown and Type UAS Flown	Please describe any Formal UAS training or relevant experience.
Please list pilot certificate and ratings currently held if any:		Class of medical certificate held if any:

LIABILTY WAIVER

Hold Harmless Agreement

In consideration of [Member] permitting [Vendor] to come onto [Member]'s property to provide certain services, [Vendor] agrees to hold [Member] and The Texas A&M University System, its Board of Regents, officers, employees, and agents harmless and relieve them from any responsibility or liability for any legal action or damage, cost, or expense (including attorneys' fees) resulting from that work on [Member]'s property and which may result in any injury to a worker employed by [Vendor].

The substantive laws of the State of Texas (and not its conflicts of law principles) govern all matters arising out of or relating to this agreement and all of the transactions it contemplates.

Signature: _____

Vendor Name: _____

Printed Name of Person Signing: _____

Title: _____

Date: _____

Alternate 2:

WAIVER, INDEMNIFICATION, AND MEDICAL TREATMENT AUTHORIZATION FORM

1. EXCULTATORY CLAUSE. In consideration for receiving permission to participate in the activity of _____ Project (the "Activity"), I, ___[INSERT NAME OF INDIVIDUAL]____ (the "Participant") hereby release, waive, discharge, and covenant not to sue [System Member Name], The Texas A&M University System, their respective members, regents, officers, servants, agents, representatives, volunteers, students, or employees (hereinafter referred to collectively or individually as to as RELEASEES) from any and all liabilities, claims, demands, injuries (including death), or damages, including court costs and attorney's fees and expenses, that may be sustained by me while participating in such Activity, while traveling to and from the Activity, or while on the premises owned or leased by RELEASEES, including injuries sustained as a result of the sole, joint, or concurrent negligence, negligence per se, statutory fault, or strict liability of RELEASEES, except as may arise from an independent duty. I understand this waiver does not apply to injuries caused by intentional or grossly negligent conduct.

2. INDEMNITY CLAUSE. I am fully aware that there are inherent risks to myself and others involved with this Activity, including but not limited to: _____. Despite these risks, I choose to voluntarily participate in the Activity with full knowledge that the Activity may be hazardous to me and my property, and to the person and property of others. I acknowledge there may be physically strenuous activities. I know of no medical reason why I should not participate.

3. INSURANCE. My employer shall carry appropriate General Liability and Workers' Compensation Insurance.

4. BINDS HEIRS. It is my express intent that this agreement shall bind the members of my family and spouse, if I am alive, and my heirs, assigns and personal representatives, if I am deceased, and shall be governed by the laws of the State of Texas.

5. MEDICAL AUTHORIZATION, INDEMNITY FOR MEDICAL EXPENSES, and WAIVER. I understand RELEASEES cannot be expected to control all of the risks articulated in this form and RELEASEES may need to respond to accidents and potential emergency situations. Therefore, I hereby give my consent for any medical treatment that may be required, as determined by a medical professional at the medical facility, during my participation in this activity with the understanding that the cost of any such treatment will be my responsibility. I agree to release, waive, discharge, and covenant not to sue, RELEASEES from any and all liabilities, claims, demands, injuries (including death), or damages, including court costs and attorney's fees and expenses, that may be sustained by me while receiving medical care or in deciding to seek medical care, including while traveling to and from a medical care facility, including injuries sustained as a result of the sole, joint, or concurrent negligence, negligence per se, statutory fault, or strict liability of RELEASEES, except as may arise from an independent duty. I understand this waiver does not apply to injuries caused by intentional or grossly negligent conduct.

SIGNING THIS DOCUMENT INVOLVES THE WAIVER OF VALUABLE LEGAL RIGHTS.
CONSIDER CONSULTING YOUR ATTORNEY BEFORE SIGNING THIS DOCUMENT.

SIGNED this _____ day of _____, 20_____.

Participant Signature: _____

CONTRACT

OPERATION OF A UAS BY A THIRD PARTY OR HOBBYIST OVER MEMBER PROPERTY MUST BE UNDER CONTRACT WHICH

A) HOLDS THE MEMBER HARMLESS FROM ANY RESULTING CLAIMS OR HARM TO INDIVIDUALS

B) PROVIDES THAT THE UAS OPERATOR IS RESPONSIBLE FOR DAMAGE TO MEMBER PROPERTY

C) PROVIDES THAT THE UAS OPERATOR WILL OBTAIN INSURACE AS REQUIRED BY SYSTEM RISK MANAGEMENT

QUESTIONS

TEXAS A&M AGRLIFE SUPERVISING AUTHORITY CONTACT INFORMATION

JESSICA FLORES

979-862-2689

JESSICA.FLORES@AG.TAMU.EDU

UAS@AG.TAMU.EDU