**University of Nebraska Unmanned Aircraft Systems (UAS) Project Approval**

***It is anticipated that the information requested to approve UAS activities will change, based on FAA regulations and insurance industry expectations. This information request inventory will be periodically reviewed and modified as necessary.***

The following information is required to be collected using any auditable/traceable electronic or paper format selected by each University of Nebraska campus. The approval process is required by Executive Memorandum 31, and is applicable to all University of Nebraska contracted, institutional, instructional, research, service or Extension programs and projects administered or conducted on any campus, University controlled land area, Research & Extension Centers, and the Nebraska College of Technical Agriculture. The information collected must be in a format that allows retrieval for seven (7) years after final approval, deferral, or rejection.

Campuses should include an affirmative check-off indicating signatory acknowledgement and understanding of Executive Memorandum 31, including Section 4 (Penalties for violation of policy).

All electronic or paper signature routing should have date/time stamps.

Provisional Approval is required prior to initiating a Certificate of Waiver or Authorization (COA) application; final approval is only granted after appropriate Federal/State/Local authorizations have been obtained.

**Required Data Elements**

Project Leader (PL) Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

PL Work Phone Number \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

PL Emergency Contact Number (Cell) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

PL Email Address \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

PL Work Address \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

PL Department and College/Institute \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

I. PROJECT SUMMARY

A. Justification or purpose

1. Purpose of Use – Check all applicable uses

* Advertising/Marketing
* Aerial Testing/Demonstration
* Atmospheric/Weather Research
* Building Maintenance/Real Estate Sales
* Cargo/Freight Carrying
* Construction/Engineering/Industrial
* Crop Management/Extension
* Education/Training
* Emergency Management—Police, Fire, Search/Rescue
* Homeland Security/Military (Non-Combat)
* Mapping
* Photography/Video/Film Production/Marketing/Communications
* Pipeline/Powerline Patrol
* Surveillance
* Thermal Imagery/Ground Sensing
* Wildlife Observation
* Other uses not indicated above (explain)

2. In lay language, please describe the specific objectives of the UAS use, including the type of data to be collected \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

3. Describe how you will use the UAS to achieve these objectives \_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

B. Proposed Aircraft Type and Weight (55 pounds maximum [one-time preparation of UAS specifications]…UAS Identification should cross-link with operator qualifications, Section C below)

1. Aircraft platform (aircraft type [fixed wing, etc.], manufacturer, model)

* Make and Model \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Registration Number (if applicable) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Manufacturer’s Serial Number \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* If aircraft has no registration number or manufacturer’s serial number, please describe how aircraft can be positively identified in the event of an incident, accident, or claim \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

* Date Purchased \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* New or Used \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Price Paid $\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Present Estimated Value with all attached equipment/and any modifications made since purchase $\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Aircraft Type (check all that apply)
  + Fixed-wing
  + Rotor-wing
  + Balloon
  + Glider
  + Single-engine
  + Multi-engine
* Does this aircraft burn combustible fuel?
  + Yes, type \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
  + No
* Normal Control
  + Manually flown
  + Semi-autonomous
  + Fully autonomous
* Type of launch
  + Traditional takeoff
  + Hand
  + Rail
  + Other (please describe) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Type of recovery
  + Traditional landing
  + Net/Line capture
  + Parachute
  + Other (please describe) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Maximum Gross Take-off Weight (including all installed/carried equipment and payload [Specify lbs./Kg]) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Wingspan/Rotor Diameter (Specify cm, in, feet, or meters) \_\_\_\_\_\_\_\_\_\_\_
* Maximum Endurance (in hours) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Maximum Operating Altitude (in feet) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Maximum Range (Specify feet, yards, meters, miles, or kilometers)

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

* Maximum Speed (in nautical mile per hour) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Does the aircraft have the ability to independently detect and avoid other aerial traffic?
  + Yes
  + No
* In the event of a lost link between the ground control station and the aircraft, does the UAV contain an automated recovery program that allows for it to safely return to a predetermined point?
  + Yes (please described procedure below)

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

* + No
* Are there redundancies built in for the aircraft’s propulsion system?
  + Yes
  + No
* Are there redundancies built in for the aircraft’s flight control surfaces?
  + Yes
  + No
* Are there redundancies built in for the aircraft’s navigation/communication systems?
  + Yes
  + No
* Aircraft Manufacturer’s website \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Website (e.g., YouTube) where video of UAV can be viewed

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

2. Associated payload (example: number and types of cameras, etc.)

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

3. Describe manufacturer’s aircraft and payload specifications \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

4. Describe your preventive maintenance plan, general repair practices, and sourcing for replacement parts

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

C. **UAS Operator Information**  
*(Duplicate section as necessary for multiple operators associated with a single project. Ideally, database storage of all campus UAS operator information would require data to be entered once, and updated yearly or more often as needed.)*

*Participation in internal (University of Nebraska) training and educational programs should be documented; as an educational institution it is recognized that not all potential UAS operators will have been fully trained prior to supervised flight operations.*

***If the UAS is to be operated outdoors, UAS Operator information is required for all operators.***

***If UAS is to be operated indoors, the project leader (or designated primary operator if UAS not operated by the PL) and frequent operators (e.g., students/staff working on UAS projects) must complete all UAS operator information.***

***A PL/operator approved for indoor UAS demonstrations or instructional activities who will be directly supervising occasional flyers may collect operator names and record/document their individual flight details (date, time, length, etc.) in lieu of entering UAS Operator information in a project approval form. Flight documentation for occasional flyers must be retained for 7 years after the last recorded flight.***

***Contracts with non-NU employees operating non-NU owned UAS must include similar data requests from the vendor.***

UAS Operator Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

UAS Operator Emergency Contact Number\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Indicate the qualifications of each operator.

* Is the operator a certified pilot <yes / no>
  + If a certified pilot:

1) Airman Certificate Number: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

2) Limitations \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**CURRENT PILOT CERTIFICATES AND RATINGS**

* + - Student: Since (date) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
    - Private
    - Commercial
    - Airline (ATP)
    - Rotocraft
    - Instrument \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
    - Single Engine – Land
    - Single Engine – Sea
    - Center Line Thrust
    - Multi-Engine-Land
    - Multi-Engine – Sea
    - Instructor \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
      * Type Rated in (type of aircraft)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
    - Glider
    - Light Sport Aircraft
    - A&P Mechanic
    - Other \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
  + If not a certified pilot:
    - Have you successfully completed an FAA (or equivalent) Private Pilot ground instruction course? <yes / no>
    - If you answered “Yes” to the question above, have you passed the FAA (or equivalent) Private Pilot written examination?
    - Yes (date passed) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
    - No
* Does the individual hold a current and valid medical certificate <yes, no>
  + If yes:
    - Class
    - Expiration Date
    - Limitations
* Date manufacturer’s training for specific UAS to be insured was completed: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* **ADDITIONAL TRAINING APPLICABLE TO UNMANNED** **AIRCRAFT**
  + Name and Location of school/training/other provider \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
  + UAS Model(s)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
  + Date Completed \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
    - Check all the apply:

\_\_\_\_\_ Initial Manufacturers Training

\_\_\_\_\_ Recurrency Training

\_\_\_\_\_ Crew Resource Management (CRM)

\_\_\_\_\_ Simulator Proficiency/Recurrent

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **UNMANNED AIRCRAFT PILOT/OPERATOR EXPERIENCE AND CURRENCY** | | | | | |
| **Itemized Pilot-In-Command / Primary Operator Experience with Unmanned Aircraft** | | | | | |
| UAS Group | Make(s) & Model(s) | **Number of Missions Flown/Launches/Recoveries** | | | |
|  | | Total | Last 90 days | Last 30 days | Last 12 months |
| Insured Make and Model |  | **/ /** | **/ /** | **/ /** | **/ /** |
| GROUP 1  (MGTOW 0-20 lbs.) |  | **/ /** | **/ /** | **/ /** | **/ /** |
| GROUP 2  (MGTOW 21-55 lbs.) |  | **/ /** | **/ /** | **/ /** | **/ /** |

* Have you ever had an aircraft claim, incident or accident?
  + Yes
  + No
* Have you ever been cited or fined for violation of an aviation regulation?
  + Yes
  + No
* Has your pilot certificate ever been suspended or revoked?
  + Yes
  + No
  + N/A

D. Proposed Date(s) of UAS use \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

E. Location and Area of Use Information

1. Proposed location(s) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

2. Property owner(s) of proposed locations(s) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

3. Proximity of proposed location(s) to inhabited areas such as campus structures, residential or business districts, etc.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

4. Describe protocols for notifying adjacent property owners \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

F. Funding source(s) (agency, NU internal, etc.) for the purchase and use of UAS

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

II. PRELIMINARY APPROVALS – Route this form and the required attachments for review and preliminary approval to the following individuals: [For indoor flights, confirmation of insurance coverage by Risk Manager should trigger final approval.]

* + Project Leader
  + Department Chair/Head (if relevant)
  + Dean (if relevant)
  + Business and Finance
  + Risk Manager (Prior to acknowledging/approving the document, the campus risk manager must affirm that insurance coverage complying with campus and NU policies will cover the UAS and proposed activities/use)

III. After preliminary approval is obtained, attach Certificate of Waiver or Authorization (COA) and all other required approvals.

IV. FINAL APPROVALS – Route this form and the required attachments for review and preliminary approval to the following individuals:

* Project Leader (certifying that all necessary approvals have been obtained)
* Department Chair/Head (if relevant)
* Dean (if relevant)
* Business and Finance
* Chancellor
* Risk Manager (notification only)
* Campus Security/Police (notification only)