Drone Mission Plan and Risk Assessment

The Remote Pilot (RP) must send this completed document to the Health, Safety and Resilience Team (healthandsafety@swansea.ac.uk). Approval must be received before any drone operation takes place.

Once approved, the Remote Pilot (RP) must ensure the form is available for the duration of the operation, with the on-site assessment (final page) completed on the day(s) of the mission and stored for future reference.

|  |
| --- |
| **Mission Proposer (if different from Remote Pilot below)** |
| **Name:** |  | **Tel:** |  |
| **Email:** |  |
| **Faculty/ PSU:** |  | **Staff/ Student:** |  |
|  |
| **Remote Pilot (RP)** |
| **Name:** |  | **Tel:** |  |
| **Faculty/ PSU:** |  | **Email:** |  |
| **Staff/ Student** |  |
| **RP Qualifications:** |  | **RP Flyer ID:** |  |
|  |
| **Observer(s)** |
| **Name(s):** | **Staff/ Student:** | **Tel:** | **Email:** | **Faculty/ PSU:** |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

\*Add more rows if required.

|  |
| --- |
| **Emergency Contacts** |
| **SU Security:**01792 604271 | **Hospital:**999 | **Police:**999 | **Civil Aviation Authority:**020 7 379 7311 |

|  |
| --- |
| **Mission Plan** |
| **Mission Location[[1]](#footnote-1):** |  |
| **Dates and Time[[2]](#footnote-2)** | **Date From:** | **Date To:** | **Times:** |
|  |  |  |
|  |
| **Permission Requiredto Fly in Area?** | **Yes** ☐ | **No** ☐ | Summarise if answered ‘Yes’ e.g. Air Traffic, Landowner: |

|  |  |
| --- | --- |
| **Type of Mission[[3]](#footnote-3):** |  |

|  |  |  |
| --- | --- | --- |
| **Flight Details** | **Number and duration:** |  |
| **Flight ID (if applicable):** |  |

|  |  |
| --- | --- |
| **Payload . Requirements[[4]](#footnote-4):** |  |
| **Detailed mission description:** |
| Attach a map or zoomed in Google Earth image of the intended fly zone, detailing intended fly zone boundaries, entry/ exit points, location of primary take-off/ landing/ alternate landing zone. **In addition,** indicate hazards in or close to the fly zone e.g., trees, pylons, buildings, or areas of the University estate which may be ‘over flown’. |

|  |
| --- |
| Site/ DRONE OPERATION RISK Assessment – state ‘YES’ to confirm addressed or state N/A |
| The following Risk Assessment must be completed for all Missions with details given of specific, Mission related significant hazards and the controls needed to manage these (t*he text at the base is an example only)*. A final On-Site Assessment (see final page) is also then required to capture any changes once on site. |
| **Public Access:** Risk of uninvolved persons? Can public easily access site/ flight area? |  | **Livestock:** Are animals in the flight area that could be distressed by the SUA? |  | **Terrain:** e.g. hills blocking VLOS, gradients affecting SUA GPS signal  |  |
| **Hazards:** e.g. industrial sites, gas venting, signals affecting SUA controls |  | **Congested Area:** Is area substantially used for residential, industrial, commercial, or recreational purposes? |  | **Landowner Permission(s):** Is authorisation needed to use the site? |  |
| **Airspace Type:** e.g. Controlled/ Protected/ Air Traffic Zone (ATZ) |  | **Other Aircrafts:** e.g. other SUAs, model aircrafts operating in the flight area |  | **Cordon Needed:** Is a cordon needed to physically prevent access to the flight area? |  |
| **Extraordinary Restrictions:** e.g. airspace at prisons or nuclear sites |  | **Obstructions:** e.g. pylons, trees, masts, buildings, chimneys, bridges |  | **Proximity Limits:** Is a specific exclusion area for non-flight personnel needed? |  |
| **Weather:** Are specific conditions required e.g. dry, no frost, no rain? |  | **Wind Speed:** Is there a maximum speed that must not be exceeded? |  | **Tide Times/ Daylight Hours:** Are specific times essential to the mission?  |  |
| **Take Off Site:** Has it been identified? |  | **Landing Site:** Has it been identified and assessed? |  | **Alternate Site:** Has it been identified and assessed? |  |

 **Blank Page**

|  |
| --- |
| **Risk Assessment**  |
| **Significant hazards** | **Who/ what may be harmed** | **What are you already doing to prevent harm** | **Further actions/ considerations** | **Action by** |
| Example |
| Working Dock Nearby - electronics on vessels could cause radio interference leading to loss of control of SUA | Pilot, Observers, other persons, and assets (e.g. boats) in the fly zone  | * Dock Yard owner permission given and who has agreed to inform vessel owners of flight
* SUA will travel along shoreline and dock perimeter
* 50m overhead clearance with vessel masts always
 | * Confirm arrival on site with Dock Yard owner and check no new vessels docked which could cause signal interference
 | RP |
| Wind Speed – winds more than 15mph may affect SUA stability  | SUA, all persons in fly zone  | * Weather conditions checked for flight period, (including after in case of overrun) and currently suitable
 | * Take anemometer to measure wind speed
* Abort flight if wind speed exceeds 15mph
 | RP |
| Public beach – others may enter the shore area in the flight zone, working adjacent to tidal water | Non flight personnel  | * Flight mid-week when shore should be quieter
* RP will always keep SUA in VLOS
* Two Observers will be on site to warn others
 | * RP and Observers to wear Hi-vis
* Confirm tide times and undertake SUA operation at low tide
 | RP |
| **Risk Assessment (start here)** |
| **Significant hazards** | **Who/ what may be harmed** | **What are you already doing to prevent harm** | **Further actions/ considerations** | **Action by** |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

|  |  |  |  |
| --- | --- | --- | --- |
| **External Sites to be ‘over flown’:** |  | **Contact details of person/ organisation to be informed:** |  |
| **Permission Given:** | **Yes** ☐ | **No** ☐ |

|  |  |  |  |
| --- | --- | --- | --- |
| **Air Traffic Zones (ATZ) to be ‘over flown’:** |  | **Contact details of ATZs to be Informed:** |  |
| **Permission Required:** | **Yes** ☐ | **No** ☐ |

|  |  |
| --- | --- |
| **Remote Pilot Declaration:** | I confirm I will ensure:* The flight is undertaken in accordance with the Drone Mission Plan & Risk Assessment.
* All drone operations are carried out in accordance with relevant University’s Policies and Procedures.
* Pre-flight, the On-Site Assessment will be completed which includes:
* A further dynamic Risk Assessment of the site.
* The provision of a suitable Briefing (including emergency procedures) to all persons involved with the drone operation.
* Checks of the drone to ensure in correct working order.
 |

|  |  |  |
| --- | --- | --- |
| **Approved by theHealth, Safety and Resilience Team:** | **Name:** | **Date:** |
| **Comments/ Caveats:** |  |

|  |
| --- |
| **On-Site Risk Assessment** |
|  |
| **Pre-Flight**The RP must undertake an On-site Assessment to ensure the details in the Mission Plan & Risk Assessment remain current. The RP must brief all relevant persons in this document and any adjustments due to changes in on-site conditions. The Briefing must also include key personnel, key contacts, and emergency procedures. |
| RP Observations/ Additional Actions from On-Site Assessment (detail): |

|  |  |  |  |
| --- | --- | --- | --- |
| **SUA Pre-flight Checks by:** |  | **Date and Time:** |  |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Permissions Given (e.g., ATZ)?** | **Yes** | **No** | **N/A** | **Date and Time:** |  |
| ☐ | ☐ | ☐ |

|  |  |  |  |
| --- | --- | --- | --- |
| **Pre-flight Briefing by:** |  | **Date and Time:** |  |

|  |
| --- |
| **Post Flight**Post-flight, the Remote Pilot must record basic flight details and any issues which require further action. |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Number of Flights:** |  | **Flight Durations:** |  |  | **Any Incidents[[5]](#footnote-5):** | **Yes****☐** | **No****☐** |

|  |
| --- |
| **Any issues or alerts on SUA, batteries, payload or systems:** |
|  |

|  |
| --- |
| **Further Action Required:** |
|  |

1. Sufficient information to locate the Mission; area, postcode, What.three.words **specific** **parts of the University estate to be ‘over flown’.** [↑](#footnote-ref-1)
2. Approximate range of dates if exact date not known. Times may be critical e.g., daylight hours, tide times. [↑](#footnote-ref-2)
3. For example, Video Survey, 3D Data Capture Test Flight, Gas Detection, what data will be captured, what will be tested etc. [↑](#footnote-ref-3)
4. If required, describe the payload and any mounting/ gimbal requirements. Also identify external power requirements the payload may have and the estimated combined take off mass of the SUA and payload. [↑](#footnote-ref-4)
5. All incidents no matter how minor must be reported as per University REPORT IT procedures [↑](#footnote-ref-5)