Job Hazard Analysis

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| **University of Washington:** UW Seattle | | **Department:** Department of Aeronautics and Astronautics | | |
| **Activity or Process:** UAV assembly | | **Building/Room:** AERB 117 | | |
| **Job Title:** Student Researcher | | **Supervisor:** Christopher Lum, Ph.D | | |
| **Prepared By:** Nicholas Price | | **Date: 1/9/2019** | | |
| ***This document is the certification of hazard assessment for PPE for the workplace.*** | | | | |
| **TASKS/STEPS** | **HAZARDS** | **CONTROLS (SAFEGUARDS)** | | **PHOTO** |
| 1 Wiring | * Electrical shock * Fire * Click to add a hazard. * Click to add a hazard. | * Third party approved wiring i.e. listed * Wire design review to ensure the load current is not exceeded * Visual inspection of wiring * First aid kit available * Click to add a control. * Click to add a control. * Click to add a control. | |  |
| 2 Soldering inside the device | * Burns from hot element * Lead or rosin flux fume exposure * Click to add a hazard. * Click to add a hazard. | * Utilize holder for soldering iron * Lead and rosin free solder used when possible * Fume extractor available * First Aid Kit available * Materials tracked in MyChem * Click to add a control. * Click to add a control. | |  |
| 3 LiPo battery: connecting | * Battery leak * Fire * Click to add a hazard. * Click to add a hazard. | * All manufacture instructions are followed for the appropriate battery * Reference LiPo battery JHA * Sprinklers and fire alarm pull system * Click to add a control. * Click to add a control. * Click to add a control. | |  |
| 4 Epoxy Adhesives | * Toxic chemicals and fume exposure * Potential allergy or sensitivity development * Click to add a hazard. * Click to add a hazard. | * Maintain and review SDS for hazardous components * Wear protective clothing and prevent contact with skin * Eye wash station * Utilize fume hood during all use * Click to add a control. * Click to add a control. * Click to add a control. | |  |
| 5 Attaching props and motor | * Moving parts * Testing props * Lacerations * Click to add a hazard. | * Props are not attached until the end * Props attached when equipment is fully deenergized and is the final step in UAV assembly * Prop guards in place between tests * Click to add a control. * Click to add a control. * Click to add a control. * Click to add a control. | |  |
| **Required Training** | | **Required PPE** | | |
| Basic Electrical Safety (EH&S, online)  Click to add required training.  Click to add required training.  Click to add required training. | | Safety Glasses  Click to add head protection.  Click to add body (foot, leg, hand, or arm) protection.  Click to add hearing protection.  Click to add respiratory protection. | | |
| ***I have read and understand the contents of the job hazard analysis and the controls required to mitigate the risks from the idenitified hazards*** | | | | |
| **Name** | | | **Date** | |
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