**`GENERAL RISK ASSESSMENT FORM**

**Section 1: Assessment Overview**

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| --- | --- | --- |
| **Assessment Reference Number:** | **Version Control** |  |

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| --- | --- | --- | --- |
| **Name of Assessor** | James Davies |  |  |
| **Description of Area / Procedure / Task being assessed** | Gyroscopic Stabilisation systems for motorbikes | | |
| **Location** | University of York | | |

**Section 2: Persons Affected**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Who might be affected by this work?**  (delete 🗸 as applicable) | James Davies | **Are any vulnerable groups affected?**  (delete 🗸 as applicable) | No | **How many people are affected?**  (delete 🗸 as applicable) | 1 |

**Section 3: Review**

|  |  |  |  |
| --- | --- | --- | --- |
| **Date for Next Review of this Document** | **Date Document Reviewed** | **Reviewed by (print name)** | **Signature** |
| 13th Novemeber 2017 | 27th September 2017 | James Davies |  |
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**Section 4: Risk Assessment**

**Risk Matrix**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Hazard Severity Score** | | **Likelihood** | | **Probability**  **Severity** | **1** | **2** | **3** |
| **Negligible Injury or Damage** | **1** | **Unlikely** | **1** | **1** | **LOW** | **MEDIUM** | **MEDIUM** |
| **Minor Injury or Damage** | **2** | **May Happen** | **2** | **2** | **MEDIUM** | **MEDIUM** | **HIGH** |
| **Major Injury or Death** | **3** | **Almost Certain** | **3** | **3** | **MEDIUM** | **HIGH** | **HIGH** |

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| --- | --- | --- | --- | --- | --- | --- | --- |
| **No.** | **Description of Hazard** | **Hazard Score** | **Initial Likelihood Score** | **Initial Risk** | **Controls** | **Residual**  **Likelihood Score** | **Residual Risk** |
| 1 | Shorting lithium polymer battery could lead to compromised battery casing. | **3** | **2** | **High** | * Using smaller power supplies for early stage development. * Check all cables and wiring before attaching Lithium ion battery * Using Dean power connectors with in line fuses | **1** | **Medium** |
| 2 | Inertial momentum of heavy objects | **2** | **2** | **Medium** | * Ensuring all casing for the heavy fly wheel is secured and undamaged before turning on the motors. * Visual checks to ensure the structural integrity of the surround frames before use. * Will be safeguarded by spinning up in inside a housing. | **1** | **Medium** |
| 3 | High current electronics for motor power | **1** | **1** | **Medium** | * Check power connections for any damage before operation. | **1** | **Low** |
| 4 |  |  |  |  |  |  |  |
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**Section 5: Assessment Sign-Off**

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| --- | --- | --- | --- |
| **Assessor’s Signature** |  | **Position** | **Student** |
| **Print Name** | **James Davies** | **Date** | **27/09/2017** |
| **Additional Comments** |  | | |

|  |  |  |  |
| --- | --- | --- | --- |
| **Assessment Agreed by** |  | **Position** |  |
| **Print Name** |  | **Date and Time** |  |
| **Additional Comments** |  | | |

**Section 6: Communication of Risk Assessment**

I have read and understood the contents of this risk assessment.

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| --- | --- | --- |
| **Name** | **Date** | **Signature** |
| James Davies | 27/09/2017 |  |
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