

Assignment 1 - System Categorization  
*Security Categorization*  
CSE 4380

Group Thorin

February 28th, 2025

Members:   Obadah Al-Smadi  
                  Betim Hodza  
                  Elliot Mai  
                Benjamin Niccum  
                Nicholas Pratt  
Instructor:   Trevor Bakker

# Contents

<b>1</b>	<b>Security Categorization</b>	<b>4</b>
1.1	Reference Standards . . . . .	4
1.2	Impact Levels (Confidentiality, Integrity, Availability) . . . . .	4
1.3	Overall Categorization . . . . .	4
1.4	Justification . . . . .	4
<b>2</b>	<b>Risk Management &amp; Compliance</b>	<b>5</b>

**List of Figures**

**List of Tables**

# 1 Security Categorization

## 1.1 Reference Standards

- FIPS 199: Security categorization for federal systems.
- NIST SP 800-60: Mapping security categories to information types.

## 1.2 Impact Levels (Confidentiality, Integrity, Availability)

Information Types	Confidentiality	Integrity	Availability
Power Supply/ Battery	L minimal impact due to information only of the battery itself	L Due to loss of Integrity	H severe impact to the mission can no longer operate drone without power
Rotors / ECU	L Due to loss of Confidentiality	L Due to loss of Integrity	L Due to loss of availability, severe impact to the mission capability
FILL	L Due to loss of Confidentiality	L Due to loss of Integrity	L Due to loss of availability, severe impact to the mission capability
FILL	L Due to loss of Confidentiality	L Due to loss of Integrity	L Due to loss of availability, severe impact to the mission capability
FILL	L Due to loss of Confidentiality	L Due to loss of Integrity	L Due to loss of availability, severe impact to the mission capability
General- Information	L	L	L
<b>System Categorization</b>			
	Moderate	High	High

## 1.3 Overall Categorization

## 1.4 Justification

## 2 Risk Management & Compliance

Alignment with Risk Management Framework (RMF) per NIST SP 800-37. Categorization informs security control selection (NIST SP 800-53). Ongoing assessment and mitigation per FIPS 200 minimum security controls.