



BRIGHAM YOUNG UNIVERSITY
AUVSI CAPSTONE TEAM (TEAM 45)

Design Summary

ID	Rev.	Date	Description	Author	Checked By
????	0.1	03-13-19	System Refinement Review	AUTHOR	CHECKED BY

1 Introduction

The BYU AUVSI Capstone team is competing in the AUVSI SUAS 2019 competition this summer. The mission portion of the competition requires a small unmanned aircraft system (UAS) to autonomously fly to given waypoints, avoid imaginary obstacles, identify visual and geospatial characteristics of objects on the ground, and accurately drop a payload consisting of an unmanned ground vehicle (UGV) that is capable of autonomously driving to another location. Our team consists of four primary subteams: Airframe, Controls, Vision, and UGV. Because our system performance is primarily measured by the performance metrics of each subteam, the following sections in this artifact will summarize the description and performance of each subteam.

2 Design Description

2.1 Airframe

2.2 Controls

2.3 Vision

2.4 UGV

3 System Performance

3.1 Airframe

3.2 Controls

3.3 Vision

3.4 UGV

4 Conclusion